



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Richard Graff

For: COMPUTERS MAKING FINANCIAL
ANALYSIS OUTPUT HAVING
PROPERTY VALUATIONS

USSN: 09/134,453

Filed: August 14, 1998

)
)
)
) Group Art Unit: 2761
)
)
)
) Examiner: N. Rosen
)
)
)

~~#~~ 32 Kyrly
Brink

REPLY BRIEF

Table of Contents

Title Page	1
Table of Contents	2
Reply Brief	3
IX. Argument:	3
X. Conclusion	113
Certificate Under 37 C.F.R. §1.8 (a)	115

IX. Argument

This Reply is structured parallel to the structure of Appellant's Brief to permit easy association of the Reply with Examiner's Answer and the Brief. However, some preliminary concerns are raised in the Examiner's Answer, which are addressed below.

1. Traversal of Claim Grouping

The Examiner contends that claims 64-75, 80-95, 226-237, and 242-257 stand or fall together because Applicant does not include a contrary statement with reasons therefore. In reply, the contention is respectfully traversed because a contrary statement for every one of these claims is in the groups of claims set forth under Sec VIII Grouping of Claims in the Brief, and reasons for each of these claims is set out therein and thereafter.

2. Incorrect Application of Patent Statutes

A. 35 U.S.C. Sec. 101 / 103

This Appeal reflects a fundamental disagreement with the Examiner as to the application of the patent statutes to examination of this patent application and computer program related inventions. As an example, the Examiner contends at page 50, lines 8 –13, that:

"The Examiner wishes to observe that many of Applicant's claims...add computer hardware limitations to *business method claims*, wherein the *computer hardware limitations are extremely well known*." (Italics added.)

Contrary to the Examiner's first italicized contention, there is no such thing as "business method claims" under Sec. 103 (or Sec. 101). Pursuant to MPEP § 2106 "claims should not be categorized as methods of doing business." The method claims in this patent application are subject to the same statutory requirements as any other method claims.

Contrary to the Examiner's second italicized contention, the claims are not merely adding hardware limitations to a business method, and both of the italicized contentions are incorrect applications of patent statutes and MPEP § 2106 to the claims. This is all well-

known and clearly settled law, e.g., *In re Alappat*.

More particularly, as to the Examiner's proposed adding "computer hardware limitations," claim 1 requires controlling a...processor in digital signal processing set out in the claims. But adding hardware cannot disclose how one goes about controlling the combination. Further, adding hardware limitations cannot suggest modifying Ginsberg to do such controlling, as the Examiner attempts.

B. 35 U.S.C. Sec. 103 "...one having ordinary skill in the art..."

Nonetheless to find a reason to modify Ginsberg, the Examiner relies on hardware, e.g., a teaching of a piece of hardware: U.S. Patent No. 4,860,238 "Digital Sine Generator" (patent title) and other non-analogous art. However, hardware (especially from non-analogous art) cannot provide a reason to modify Ginsberg so as to carry out the cooperation of parts in the claimed method steps, including controlling. A chunk of hardware does not teach or suggest what to do with the hardware. This kind of rejection is an incorrect application of Sec. 103, which requires consideration of the invention "as a whole."

C. 35 U.S.C. Sec. 103 "...invention as a whole..."

Although the prior existence of hardware (especially from non-analogous arts) cannot provide a statutorily valid reason to modify Ginsberg to do the claimed controlling, communicating, and generating steps in the operation and cooperation of the invention *as a whole* – the standard in Sec. 103 - the Final Rejection uses a piece-by-piece approach, changes theories, and cuts and pastes out of context to try to find some way to cover each claim requirement individually. As discussed more fully below, this is an incorrect application of Sec. 103 because it fails to consider the claim *as a whole*. This is a fundamental error throughout the rejection that requires reversal. See Brief at pages 92-93 (not addressed by the Answer).

D. General Genus Does Not *Prima Facie* Establish Obviousness of a Species or Subgenus

Pursuant to MPEP Sec. 2144.08 "The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness." *In re Baird*, 16 F.3rd 380, 382, 29 U.S.P.Q. 2d 1550, 1552 (Fed. Cir. 1994). For example as to the claimed communicating financial analysis output, the Examiner states that "Official Notice is taken that it is well known to electronically communicate the output of one computer as input to a second computer" (Final Rejection at page 10). But pursuant to MPEP Sec. 2144.08, one general teaching is not sufficient by itself to establish *prima facie* obviousness of the claimed species of financial analysis output, particularly because the genus does not suggest what is prescribed by other claim language. That is, the claim does not require mere output. Instead, the claim requires the particular output that meets all of the claim requirements for that output. The Board is requested to compare the Examiner's "well known to communicate the output of one computer as input to a second computer" with the full claim requirement as to what that output constitutes:

generating **a market-based valuation for the property**, wherein the property is **from a group consisting of a tax-exempt security and a portfolio of tax-exempt securities**, the market-based valuation **reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output...**

So the prior existence of communicating some kind of output from one computer as input to another does not teach or suggest the particularly claimed requirements *as a whole*. This type of rejection is an incorrect application of MPEP Sec. 2144.08 genus/species matters, as set forth below.

3. MPEP Sec. 706.02: "Everything of a personal nature must be avoided."

Appellant objects to being called names like "intransigent" in the Answer at page 57, for exercising the right to require a reference as a basis for demonstrating that the purported reason to combine or modify is premised on non-analogous art, contrary to 35 U.S.C. Sec. 103. Appellant also objects to the Examiner's reference to creating file wrapper estoppel in the

Answer at page 75, as this has no place in an appeal and is only an effort to go out of the way to damage Appellant for succeeding in an appeal. Appellant also objects to the Examiner raising issues of “failure to exercise diligence in reducing the invention to practice, or even public use or the sale of the invention more than one year before the filing date” (Answer at page 89), when the Examiner has no clue about any of this except that Appellant declines to win this case by swearing behind an art rejection that is improper. The Examiner is simply throwing mud in the hope that something will stick.

Further, the Examiner uses at least seven different and mutually exclusive interpretations of Ginsberg, switching frequently between these interpretations *without notifying the reader*, sometimes in the middle of a rejection explanation. In order to clarify the Examiner’s switches of Ginsberg interpretations for the Board, Appellant has assigned names to the distinct theories (Official Notice Theory, Actual Securities in the Generic Portfolio Theory, Options/Futures Contracts Theory, Securities Delivered Pursuant to Options/Futures Contracts Theory, Updated Index Theory, Network Theory, Market Data Theory) to keep track of the Examiner’s changing and conflicting interpretations of Ginsberg.

Appellant also objects to the Examiner withholding a patent by simply making up things, such as “a quasi-term of years” at page 77 of the Answer. There is no such thing as a “quasi-term of years.” The Examiner is making up gobbledygook.

Appellant also objects to the Examiner’s personal opinions, which are irrelevant to statutory patentability. Thus, for example, in the Answer at page 50, lines 16-20, the Examiner contends:

“Other claims... make trivial additions and distinctions to the basic claims (e.g., ...valuation for at least one security for corporate debt... vs. ...valuation for corporate debt”)

The Examiner’s opinion of triviality is irrelevant to statutory 103 analysis, and this is another incorrect application of Sec. 103. More so, a security for corporate debt (e.g., a bond) is not the same as, nor trivially different from, a corporate debt (e.g., a bank loan). Claims

68 and 72 cover species that are not trivial in the real world. The Examiner may personally feel that the claims include "trivial additions and distinctions" and "tangled phrases that make it difficult to pin down precise meanings." However, the Examiner has not met the statutory burden of showing that one having ordinary skill in the art would not clearly understand the claims and has not complied with MPEP requirements.

In sum, MPEP Sec. 706.02 provides that "Everything of a personal nature must be avoided," but the foregoing are not exemplary of compliance with this MPEP standard and indicate undue and inappropriate lengths taken by the Examiner. This approach to Examination is inappropriate.

Following now with the structure of the Appellant's Brief, please consider the Reply to the Examiner's Answer below.

A. Ginsberg and Official Notice and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 1, 3-14, 29, 31-42, 64, 66, 226, 228

a. The claimed invention is different from Ginsberg for any and all of the following reasons.

(1) Ginsberg's index does not teach or suggest the claimed property.

All claims have been rejected based on Ginsberg as a teaching of the claimed valuation of property.

Ginsberg is directed to an index, as one can see from the title and patent. Courts have considered the question of whether indexes are property, and it is well settled that an index is not property. See *Standard and Poor's Corp. v. Commodity Exch., Inc.*, 683 F.2d 704 (2d Cir. 1982) and *Board of Trade v. Dow Jones & Co.*, 439 N.E. 526 (Ill. App. Ct. 1982) *aff'd*, 456 N.E.2d 84 (Ill. 1983).

This is dispositive of the entire case. The rest of the Reply essentially sets the record straight on other matters alleged in the record.

The Federal Circuit will follow these decisions which pertain to the state law definition of property as regards indexes. Further, the Examiner has not presented any reason for the Federal Circuit to ignore these decisions, which are well-accepted, settled, and consistent case law. Like the indexes of these court decisions, Ginsberg's index is not property. Therefore, Ginsberg's valuation of his index is not a valuation of property.

In fact, Ginsberg's index is even less likely to be viewed as property than the indexes considered in these court decisions because at least the S&P and Dow are based on real and honest to goodness stocks as a basis for the mathematical construct used to produce the index valuation numbers. The Ginsberg index is more remote than these because Ginsberg's index instead uses hypothetical bonds in a "generic portfolio."

The Examiner states in the Answer at page 51, lines 4-6, that:

"Ginsberg discloses making a financial analysis for a portfolio of securities, wherein the *portfolio* may arguably be called hypothetical, but wherein the *securities* are actual property"

To the contrary, Ginsberg explicitly, directly, and unmistakably teaches that the *securities* in the *portfolio* are hypothetical too. Ginsberg teaches that his "generic portfolio" (Col. 5, line 41) is comprised of "generic securities" at Col. 5, lines 40-42, Table I, and Col. 9, line 39. See Appellant's Brief, page 82 to the top of page 83.

Further, the idea of having real securities in a hypothetical portfolio makes no sense.

Ginsberg is not "valuing securities based on market data" as the Examiner further contends at page 51. Ginsberg is using the market data to value the "generic securities," in the course of valuing his "generic portfolio" (Col. 5, line 41) to determine an index value.

To further establish the Examiner's error, the Board's attention is drawn to Col. 4, line 50, where Ginsberg states that "the on-line market data is then transmitted to the index processor, block 60, for determination of a real time index value." "Fig. 5 is a logic flow chart

depicting the processing associated with the determination... of the index value.” Col. 4, lines

22-23. Col. 4., lines 36-46 states:

the system iteratively determines the net present value for each of the four generic securities in the portfolio, including each coupon by correlating the coupon and maturity dates for the generic issues with the data set for spot rates; if a match occurs via test 780, the matching spot rate in the data set is used to calculate the NPV of the coupon, block 790, et seq. This is repeated for each coupon, J, and **each generic security in the portfolio**, K.

Once the NPV is set for all of the components in the portfolio, the system calculates the portfolio price...

Ginsberg teaches using market data to value **each generic security in the portfolio** so as *not* to value honest to goodness bonds, *not* to value an index of honest to goodness bonds, and most clearly *not* to value property. And in any case, indexes are not considered property, as per the above cited court decisions.

Answer Failed to Respond to a Critical Point

The Answer failed to respond to Appellant’s critical point in the Brief at pages 83, last paragraph, to page 84 that Ginsberg cannot be modified to carry out the claimed invention without defeating the explicit purpose of Ginsberg. Ginsberg cannot be modified to handle honest to goodness bonds because honest to goodness bonds change characteristics from day to day and expire in time, which would result in Ginsberg’s index constantly changing and expiring too, thus defeating the purpose of an index as a “real time barometer.” See Appellant’s Brief at pages 83-85. It is for this very reason that Ginsberg went through the trouble of creating an index of a “hypothetical portfolio,” Col. 3, line 39, comprised of “generic securities,” Col. 9, line 39. Ginsberg’s index approach does not work for its intended purpose with honest to goodness bonds.

Section 2143 of the MPEP provides that “if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). In this decision, the

court reversed the rejection holding the 'suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.' (*In re Ratti* at 270 F.2d at 813, 123 USPQ at 352)."

The Examiner's proposed modification or combination of Ginsberg would change the principle of operation of Ginsberg, more so in making Ginsberg inoperable for its explicitly intended purpose. That is, court decisions have held that an index like Ginsberg's is not property, and if Ginsberg's index of hypothetical bonds were modified as the Examiner proposes, honest to goodness bonds would change characteristics each day and eventually expire, so that Ginsberg's index would have constantly changing characteristics and eventually expire, thereby defeating the explicit "real time barometer" purpose. Therefore, Ginsberg, in combination with Official Notice of hardware, does not render the claims *prima facie* obvious.

This is dispositive of the entire case and reversal is required. The rest of the Brief is provided largely to set the record straight on other matters alleged by the Examiner.

Incorrect Application of Patent Statutes

As previously stated, the Final Rejection is premised on a piece-by-piece approach to obviousness, rather than the statutorily required consideration of each claim *as a whole*. The piece-by-piece approach permits the Examiner to cut and paste, change theories, and not follow the context of the teaching or the claims. At page 51, lines 10-19, the Examiner switches theories about the property from his first theory that "the *securities* are actual property" ("Actual Securities in the Generic Portfolio Theory;" see Answer at page 51) to his "Options/Futures Contracts" theory:

Applicant's argument that Ginsberg does not disclose actual property is...in conflict with Ginsberg's own words. In column 4, lines 50-67, Ginsberg refers to "quantifying and closing specific options positions pursuant to the trading of option contracts on the indexed portfolio," and "future contracts based on the portfolio index." Ginsberg further refers to a futures market based on the portfolio in column 9, line 52, through column 10, line 7, and then discloses the delivery of actual securities to be delivered pursuant to the futures contract (column 10, lines 8-19).

Option and futures contracts are property, and actual securities are actual property; therefore the index according to Ginsberg cannot be dismissed as merely hypothetical unrelated to actual property.

No, a flaw in this Theory is that the Examiner is now pointing to property that is not the subject of the Ginsberg valuation, whereas Appellant's claims require that the property must be in connection with the valuation. This error comes from failing to consider the claim *as a whole* and by cutting and pasting pieces out of context in Ginsberg.

More particularly, as to the claimed valuation, the "valuation" in Ginsberg that the Examiner relies upon is directed to the "real time valuation index" in connection with the "generic portfolio." The Examiner points to "column 4, lines 30-67; column 5, lines 34-63." (See Final Rejection at page 5, paragraph 14.) Ginsberg states "data is then transmitted to the index processor, block 60, for a real time valuation index." Col. 4, lines 51-52. This is the subject of Col. 5 too, as is clear from the discussion of the "generic portfolio" at Col. 5, line 42.

As to the claimed property, the Examiner's first theory is the securities ("Actual Securities in the Generic Portfolio Theory") which Appellant has already explained above are not property because they are "generic." As to the Examiner's second theory ("Options/Futures Contracts Theory") at page 51 of the Answer, the Examiner states:

"column 4, lines 50-67, Ginsberg refers to "quantifying and closing specific options positions pursuant to the trading of option contracts on the indexed portfolio," and "future contracts based on the portfolio index."

However, Ginsberg's system only provides market-based valuation of the "real time valuation index," not a real time valuation of the "option contracts" and "future contracts." The Examiner is skipping around in Ginsberg to find pieces to fit claim words, rather than considering the context of Ginsberg and the requirements of the claim *as a whole*.

As a third theory of the property, the Examiner points at page 51 of the Answer to the "Securities Delivered Pursuant to the Options/Futures Contracts Theory," citing Ginsberg at column 10, lines 8-19.

But again, Ginsberg's "actual securities to be delivered pursuant to the futures

contract” are not the same as the “real time valuation index” in connection with the “generic portfolio” that is the subject of Ginsberg's valuation, whereas Appellant's claims require two valuations of the same property. Therefore, under ~~all three~~ of the Examiner's cut-and-paste theories of property, Ginsberg does not teach the claimed valuation for property.

The Examiner's second and third theories attempt to leap from a valuation of the index to the downstream uses of the index, and the uses are different from the subject of the valuation of the Ginsberg index. See Brief at pages 86-87, etc. Considering the claim *as a whole*, Ginsberg does not teach the claimed first valuation and the claimed second valuation of the same property by the respectively claimed first computer and second computer and particular input / output, etc.

Also, as discussed below, under all of the Examiner theories, the Ginsberg valuation is for the index, and courts do not consider indexes to be property. Therefore, as stated at pages 85-86: “reversing the rejection on this ground is dispositive of patentability for all of the claims in all groups because all claims require a valuation of property, all rejections rely on Ginsberg as a teaching of a valuation of property, and Ginsberg does not teach or suggest the claimed valuation of property.”

Still further, the Examiner argues in the Answer at pages 51-52, that:

It may also be observed in general that modern finance involves abstractions; large amounts of money - meaning, ultimately, the possession of tangible resources may depend upon abstractions such as options, futures contracts, derivatives, and interest rate swaps. The last named, for example, typically involve the exchange of a hypothetical loan at a fixed interest rate for an equal-sized and equally hypothetical loan at a variable interest rate, after which payments between the parties to the swap depend on the difference between the fixed interest rate and the variable rate. The loans cancel one another, and are in a sense hypothetical; the interest payments are real. If the whole world were to accept Appellant's view that something hypothetical cannot be property, Wall Street would have to make major changes in its activities.

As already observed, case law has clearly held that indexes are not property. See *Standard and Poor's Corp. v. Commodity Exch., Inc.*, 683 F.2d 704 (2d Cir. 1982) and *Board of Trade v. Dow Jones & Co.*, 439 N.E. 526 (Ill. App. Ct. 1982) *aff'd*, 456 N.E.2d 84 (Ill. 1983). An

index valuation is a numerical abstraction, not property. At best it can be said that some uses of an index can be protected by unfair competition theories, but not as property. So while the Examiner's philosophy is an interesting personal point of view, Wall Street realities are totally different, as recognized by these court decisions, implemented over the decades by major players such as Dow Jones, the Chicago Board of Trade, and others. Contrary to the Examiner's lone view, realities of the art and case law are all consistent with Applicant's position: a valuation of an index is not the claimed valuation of property, especially Ginsberg's hypothetical index.

The Examiner has not answered other aspects of Applicant's point in this section of the Brief. See Brief at Pages 81-86. For the reason set forth there too, the Examiner has not made out a *prima facie* case of obviousness under Sec. 103. However, it is noted that the Examiner's above-quoted comments are incorrect in that interest rate swaps involve actual, honest to goodness loans, not hypothetical loans. The Examiner's assertion that hypothetical loans have real interest rate payments is a verbal sleight of hand to try to blur the distinction between "hypothetical" and "real."

In any case, the rejection must be reversed for the reasons given above.

(2) Ginsberg does not teach or suggest the claimed second digital computer and hardware used in the claimed method steps.

The Examiner first answers, at page 52 that:

Appellant contends that Ginsberg does not disclose the second computer and second valuation recited in Appellant's claims (Appeal Brief, pages 86-87). Examiner responds that Ginsberg does disclose generating a second market based valuation for the property (column 7, line 37, through column 9, line 51) reflecting computation of a current market-based yield discount rate for the property, meeting another limitation of claim 1, so this part of Appellant's contention should be dismissed.

First, as stated above, Ginsberg does not teach or suggest the claimed valuation of property, and this alone is dispositive. Finding a theory to add another computer to Ginsberg does not solve the problem that an index is not property. Ginsberg is valuing a hypothetical portfolio of generic securities for a "determination of real time index value" (col. 4, line 50); see also the court

decisions cited above. And the Examiner never even answered the Appellant's point that Ginsberg cannot be modified to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing / expiring bonds would mean a changing / expiring index). See MPEP Sec. 2143 regarding not changing the principle of operation of the cited art.

Also, just as the Examiner switches theories of the property, the Examiner also switches theories of the first computer and second computer, all in a cut-and-paste rejection. The first computer theory is the "Official Notice Theory" discussed below. The second theory is the "Updated Index Theory", also discussed below. This changing of theories is a consequence of failing to consider the invention *as a whole*. But changing theories still does not answer Appellant's arguments that (1) Ginsberg is an index, which courts do not consider as property, and (2) the claims require respective computers, respective valuations, and respective requirements for input/output in generating the respective valuations. Ginsberg, in contrast, does the index valuation with one computer. Appellant's method of respective and sequential computing is materially different in structure, input/output, and processing than that of Ginsberg.

More particularly, as to what it is that Ginsberg is valuing, Ginsberg does a first valuation of the index, and then updates it. Col. 9, line 20; line 50. The Examiner considers this "updated" (Col. 9, line 50) first valuation as a second valuation. This is like arguing that a 2 cycle engine teaches a 4 cycle engine because eventually the 2 cycle engine will have 4 cycles. However, a 2 cycle engine does not suggest the structure or method of operation of a 4 cycle engine. Likewise, Ginsberg's updated first valuation is not a teaching of the claimed second valuation; it is just another first valuation. Under this Updated Index Theory, the Examiner is using index processor 60 as both computers and ignoring the particular input/output requirements used to try to achieve respective valuations. But the one-computer updating does not suggest modifying Ginsberg into the claimed multiple computer structure and process, i.e., input/output, generating... a first valuation on a first computer and respectively generating... a second valuation on a second computer that receives and uses the claimed first valuation

input/output in generating the second valuation for the same property.

Note that the Examiner's switching theories of the property and the computers involves taking different pieces out of context in Ginsberg. MPEP 2143 prohibits this approach. More particularly, in the Final Rejection, the Examiner relied on Official Notice ("Official Notice Theory") for the teaching of the claimed second computer that carries out the claimed second valuation. When Appellant attacked this theory, the Examiner switched to the Updated Index Theory, and then at page 53, line 16, offers the "Network Theory," cutting and pasting pieces of Ginsberg out of context. Appellant is not clear on whether the Network Theory is a variant of the Updated Index Theory, as the Examiner sometimes uses the theories separately and sometimes uses the theories collectively. However, a problem with the Network Theory is that it relies on the "updated" Ginsberg valuation as the second valuation and has the Ginsberg index "valuations" being done on one computer (index processor 60), while the network receives the data dump as somehow being the second computer that is claimed as doing the second valuation of the property. Under whatever theory, the Examiner is using, one cannot bend Ginsberg (index is not property) into the claim limitations of the different structure, input/output, and generating... a first valuation on a first computer and respectively generating... a second valuation on a second computer that receives and uses the claimed first valuation in generating the second valuation for the same property – especially without contradicting Ginsberg's "real time barometer" purpose. See MPEP Sec. 2143.

At page 52 of the Answer, the Examiner changes theories again back to the Official Notice Theory of the claimed second computer, and states:

Appellant is correct that Ginsberg does not expressly disclose electrically communicating some of the financial analysis output as input to a second electrical digital computer. *The issue is whether incorporating a second computer would have been obvious or nonobvious to one of ordinary skill in the art.*

(Italics added.)

To the contrary, this is clear error of law. See Incorrect Application of Patent

Statutes Above. Pursuant to Sec. 103, the issue is not *whether incorporating a second computer would have been obvious or nonobvious to one of ordinary skill in the art*. The issue is whether the claim **as a whole** would have been obvious. The Examiner's piece-by-piece approach to Sec. 103 is an error of law, and the Board is directed again to Appellant's Brief at pages 92-93 regarding the Examiner's use of an improper legal standard in rejecting the claims as requiring reversal. The Examiner did not reply to this section of the Brief.

The Examiner's Answer concedes "Applicant is correct that Ginsberg does not expressly disclose electrically communicating some of the financial analysis output as input to a second electrical digital computer" at page 52. Although it is not clear whether the Examiner is using the Official Notice Theory or the Updated Theory at page 52 of the Answer, the Examiner states:

it would have been obvious "to electronically communicate at least some of the financial analysis output as input to a second computer ... for the obvious advantage of making the information ... available for use by the second computer, which might be remote from the first computer, or possess capacities (e.g., greater processing power, access to confidential information) lacking in the first computer."

This explanation of a reason to modify Ginsberg makes no sense because, if Ginsberg's index processor 60 was capable of producing a valuation, then there would be no motivation for a "second computer... [to] possess capacities (e.g., greater processing power, access to confidential information) lacking in the first computer." There could be nothing lacking in the first computer if it had the capability of doing the initial valuation that is being "updated." Also, nothing in the Ginsberg process of doing a valuation suggests any advantage to using a remote computer using the information to do the "updating," and such a modification would be so complicated and expensive as to be counterintuitive. Further, this contention fails to consider the invention *as a whole* because it does not address the full requirement of what is being communicated and then processed. See General Genus Does Not *Prima Facie* Establish Obviousness of a Species or Subgenus, above.

The rejection is based on an erroneous legal standard (piece-by-piece obviousness rather than considering the claim *as a whole*), and false interpretation of Ginsberg's "updated" valuation as the claimed second valuation and an implausible theory for a modification. Under the Official Notice Theory, Updated Theory, and the Network Theory, the only convincing reason to even attempt modifying Ginsberg is a hindsight reconstruction inspired by Appellant's claims. Indeed, the Examiner's switching between seven theories is an indication of hindsight. And in any case, Ginsberg is directed to an index, and courts hold that an index is not property.

The Examiner cites, but does not apply, *In re Fine* and *In re Jones* in the Answer at page 53:

...it would have been knowledge generally available to one of ordinary skill in the art that the Internet existed, that other computer networks (e.g., LAN's and WAN'S) existed, and/or that transmission of data between computers was well known. The Internet, for example, is routinely used to communicate information from one computer to another, where the second computer is more convenient to the person who wants to view or make use of the information, or the second computer has, for one of the reasons given, greater capacities to make use of the information.... Therefore, transferring the information from one computer to a second computer would have been an obvious and motivated procedure to one of ordinary skill at the time of Appellant's invention.

In reply, first, *In Re Anita Dembiczak And Benson Zinbarg*, (4/12/1999, No. 97-1082), the Federal Circuit held:

Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. See, e.g., C.R. Bard, Inc. v. M3 Sys., Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998) (describing "teaching or suggestion or motivation [to combine]" as an "essential evidentiary component of an obviousness holding"); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) ("the Board must identify specifically . . . the reasons one of ordinary skill in the art would have been motivated to select the references and combine them"); *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (examiner can satisfy burden of obviousness in light of combination "only by showing some objective teaching [leading to the combination]"); *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (evidence of teaching or suggestion "essential" to avoid hindsight); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 297, 227 USPQ 657, 667 (Fed. Cir. 1985) (district court's conclusion of obviousness was error when it "did not

elucidate any factual teachings, suggestions or incentives from this prior art that showed the propriety of combination"). See also *In re Graham*, 383 U.S. at 18, 148 USPQ at 467 ("strict observance" of factual predicates to obviousness conclusion required). Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability: the essence of hindsight. See, e.g., *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985) ("The invention must be viewed not with the blueprint drawn by the inventor, but in the state of the art that existed at the time."). In this case, the Board fell into the hindsight trap.... The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular. See, e.g., *C.R. Bard*, 157 F.3d at 1352, 48 USPQ2d at 1232. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." E.g., *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993)

Applying this case law to this case, the Examiner has not set out a *prima facie* case because the Examiner did not "identify specifically . . . the reasons one of ordinary skill in the art would have been motivated to select the references and combine them," *In re Fritch*; and failed to satisfy burden of obviousness without "some objective teaching [leading to the combination]," *In re Fine*.

Pursuant to *In re Fine*, if the Examiner were correct in asserting that a modification to Appellant's respective computers doing respective valuations of the same property was motivated by "an obvious advantage of making the information ...available for use by the second computer...", then there would be an obvious advantage for every computer in the world to communicate all information to all other computers. This clearly is contrary to the real world, and it depends on the particular situation. The Examiner's purported motivation is so vague as to not constitute "some objective teaching [leading to the combination]" pursuant to the requirement in *In re Fine*.

As mentioned above, the Examiner did not respond to Appellant's point at pages 83-84 that Ginsberg cannot even be modified to handle the claimed valuation of honest to goodness property as claimed without defeating the explicit purpose of Ginsberg (i.e., changing / expiring bonds would mean a changing / expiring index). Thus the teaching of Ginsberg

contradicts a modification so as to have the claimed first valuation and second valuation by the claimed first computer and claimed second computer handle the respective first and second valuations of the same claimed property.

Second, the Examiner's contention that "The Internet, for example, is routinely used to communicate information from one computer to another..." is error in view of the Sec. 103 requirement of considering the art "prior to the invention." The Internet was *not* in routine use prior to the 1992 priority date of the instant application—especially for the particular data and inter-computer operations involved in the valuations of the particular property as required in the claims. Further, a teaching of communicating generic "information" is not a teaching or suggestion of the particularly claimed communicating the market-based valuation.... See General Genus Does Not *Prima Facie* Establish Obviousness of a Species or Subgenus, above.

The Examiner also states:

Ginsberg's patent itself discloses transferring information over a network, and implies transfer of information between computers, since Ginsberg refers to information (about a portfolio) being "displayed and made available to the associated network as an index" (column 9, lines 48-49).

This switch to the Network Theory shows the dangers of the Examiner's piece-by-piece obviousness approach because it permits switching theories from the Official Notice Theory to the Updated Index Theory to the Network Theory, in an effort to try to match claim parts to the cited art. Recall that under the Network Theory, the index valuation is output to others on the network. However, the Examiner's quote is misleading because the Ginsberg text continues, as bolded below:

This information is displayed and made available to the associated network **as an index, updated in real time by the current price data, in a manner analogous to the S & P 500 and Dow Jones 30 Industrials block 880.**

The Examiner's partial quote omits that the first computer is sending out the **updated** information. That is, the Network Theory has two problems (beyond the fact that Ginsberg is an index, and courts do not view indexes as property). First, the Examiner wrongly

contends that the **updated** information is the claimed second valuation when it is just another first valuation; and second, the Examiner has the **updated** information coming out of one computer (Ginsberg's Index Processor 60) instead of Appellant's claimed invention, which requires a second digital electrical computer ... generating... the second market-based valuation... with the second computer and the input... .

Additionally, Ginsberg explicitly teaches that the communication to the network is **"as an index... in a manner analogous to the S & P 500 and Dow Jones 30 Industrials"** which is not in a manner like Applicant's claimed generating... the second market-based valuation... with the second computer. That is, displaying the updated index and making it available **in a manner analogous to the S & P 500 and Dow Jones 30 Industrials** does not suggest a separate, downstream computing of a second valuation of the S&P or Dow by brokers and the like. More so, the claimed second valuation is market-based and is formed by using the claimed first valuation in the claimed input to the claimed second computer, which includes some of the particularly prescribed output of the first computer. General Genus Does Not *Prima Facie* Establish Obviousness of Species or Subgenus. The Examiner has not responded to Appellant's point that is not possible to re-do Ginsberg's market-based index valuation using first valuation as input to form the "updated" valuation, as contrasted with the claimed first valuation used in forming the claimed second valuation. See Brief at page 101.

The Examiner's partial quote of Ginsberg is misleading because the omitted sections contradict the Examiner's proposed modification of Ginsberg to reach Appellant's claims without contradicting Ginsberg.

In particular, an output index value is not consistent with the Examiner's theory of valuation of the index. Also, **an index...in a manner analogous to the S&P 500 and Dow Jones 30 Industrials** is not property, consistent with courts' decisions involving these indexes. See *Standard and Poor's Corp. v. Commodity Exch., Inc.*, 683 F.2d 704 (2d Cir. 1982) and *Board of Trade v. Dow Jones & Co.*, 439 N.E. 526 (Ill. App. Ct. 1982) *aff'd*, 456 N.E.2d 84 (Ill. 1983). The

Examiner stands alone -- against multiple court decisions, Wall Street reality, and Applicant in contending that an index such as Ginsberg's is property.

The Examiner has not made out a *prima facie* case for the reasons mentioned above.

(3) Ginsberg does not teach the claimed input (i.e., at least some of the financial analysis output as the input).

The Examiner first answers, at page 54, that

...this is a strictly contingent issue; if the use of a second computer as claimed is considered obvious over Ginsberg, inputting data to the second computer is necessarily included. The second computer cannot be a functional part of the system unless data is inputted to it.

This is no contingent use issue. The only contingency is the theory upon which the Examiner is relying in trying to make an argument. If the Examiner's theory is that the claimed second computer comes from Official Notice, then this argument is discussed subsequently concerning improper use of Official Notice for reliance on non-analogous arts. If the Examiner's theory of the second computer is the Updated Theory and/or the Network Theory, then there is only one computer (index processor 60) doing the "real time index valuation" in Ginsberg, and the index values are output onto a network **in a manner analogous to the S&P 500 and Dow Jones 30 Industrials**. Ginsberg's "updated" valuation is not the claimed second valuation, as it is just another first valuation of Ginsberg's system that does not meet the claimed input and output requirements, and Ginsberg's valuation is directed to an index that is not property.

The Examiner keeps changing theories is because there is no other way to try to cover the claim requirements. Under the Official Notice Theory especially, Ginsberg does not teach the particularly claimed input for the claimed second computer doing the second valuation, and no Official Notice of hardware can suggest the controlling. That is, in contrast to the claims, Ginsberg teaches at Col. 9 that these downstream folks use "price and yield of the

Treasury note” (sic) in doing their market analysis. Col. 9, lines 60-61. The “Treasury note” to which Ginsberg refers is not an actual security, but rather one of the generic Treasury securities. Col. 9, lines 34-44. Ginsberg’s “Price and yield of the (generic) Treasury note” (sic) is not Applicant’s claimed input (i.e., at least some of the financial analysis output from the first computer). Accordingly, there is a substantial difference between the respective inputs for the downstream use of Ginsberg’s “hypothetical portfolio” and Applicant’s financial analysis for a respective use in generating a second valuation of the same property by different computers.

Using the Network Theory that Ginsberg’s index processor 60 is doing the “valuations,” but the claim requires generating the second market-based valuation with the second digital computer and the input. While many computers generally have some kind of input, the particularly claimed input has the antecedent basis for all the particulars in the financial analysis output, which in turn requires the claimed first valuation. See also General Genus Does Not *Prima Facie* Establish Obviousness of a Species or Subgenus, above. Under the Examiner’s Updated Theory or Network Theory, index processor 60 would have to be inputting and outputting the claimed first valuation to itself to do an update using the claimed input. It makes no sense for an index to be updated using itself.

A key omission in the Answer is that the Examiner did not respond to Appellant’s point that Ginsberg cannot be modified to handle honest to goodness bonds to carry out the claimed invention (Brief at pages 83-84) without destroying the “real time barometer” object of Ginsberg (i.e., changing / expiring bonds would mean a changing / expiring index). Additionally, even if such an index did not expire, like the S&P and Dow, court decisions consistently hold that an index is not property. *Standard and Poor’s Corp. v. Commodity Exch., Inc.*, 683 F.2d 704 (2d Cir. 1982) and *Board of Trade v. Dow Jones & Co.*, 439 N.E. 526 (Ill. App. Ct. 1982) *aff’d*, 456 N.E.2d 84 (Ill. 1983).

In sum, Ginsberg does not teach the claimed method step involving the claimed input (i.e., at least some of the financial analysis output as input); all limitations of the claim must

be evaluated; 35 U.S.C. Sec. 103, *In re Miller*, 418 F.2d 1392, 64 USPQ 46 (CCPA 1969); as this limitation has not been shown, and a modification of Ginsberg that does not destroy its “real time barometer” object has not been proposed, a *prima facie* obviousness has not been established; and if the Examiner fails to establish a *prima facie* case, the rejection is improper and must be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

- 1A. Further as to a sub-group of the Group 1 claims 1, 3-14, 29, 31-42, 64 (i.e., Group 1 not including claims 30, 66, 226, 228), Ginsberg does not teach Applicant’s claimed methodology which requires that the second market-based financial analysis reflects the claimed computation of a current market-based yield/discount rate for the property being valued.**

Unable to respond to this point with the Official Notice Theory, the Examiner uses the Network Theory such that the “updated” valuation of the index is argued as the claimed second valuation; even though the “updated” index is just another first valuation and is done by the same computer (Ginsberg’s index processor 60), in contrast to the claimed second computer; even though Ginsberg does not recycle the first index valuation into the “updated” valuation, in contrast to the claimed use of the first valuation as part of the claimed input used in forming the claimed second valuation. At page 54 of the Answer, the Examiner contends that

it is true that Ginsberg’s index traders, fund managers, etc., are not doing the claimed computation, but that is because the data processing system is doing it for them.

This concedes that Ginsberg is a different method.

Further, a problem with the Network Theory and Updated Index Theory is that Ginsberg’s index processor 60 cannot be both the claimed first computer and the claimed second computer in the claimed method steps, and cannot meet both the claimed particular input and particular output requirements of Appellant’s claimed first computer and second computer in the method steps; and the output to the network is “in a manner of analogous to the S&P 500 and Dow Jones 30 Industrials,” not suggestive of doing a downstream second

valuation. Nor is Ginsberg handling the claimed property in the respective valuations because Ginsberg is directed to an index, not property.

Summary for Group 1: Ginsberg Isn't Even Close to the Claims as a Whole

The Examiner did not respond to Appellant's point that the claimed invention *as a whole* is quite different from Ginsberg. See Brief at page 89. See also, Incorrect Application of Patent Statutes, above. For these reasons too, the rejection must be reversed.

a. Other Art is Not Properly Applied Overview of Official Notice

Now switching back to the Official Notice Theory, the Examiner appears to argue that the law on non-analogous art, improper legal standard under Sec. 103, reason to combine/modify, and non-obvious product of material limitation, all do not apply to examination of this patent application. In reply, the law applies to all equally, and without arbitrary and capricious exceptions.

More particularly, the Examiner argues at page 55:

Appellant also makes new arguments regarding official notice in particular, alleging that Examiner has used official notice of individual and separate hardware possibilities strung together with guidance only from Appellant's claims, in an improper determination of obviousness.

The Examiner first presented the art to support the challenged Official Notice in the Final Rejection, so of course the Appellant's argument could not have been presented any earlier. The Examiner also cannot legitimately contend that there is a new argument because Appellant's first demand for support for the Official Notice in the Amendment and Response of November 1, 2002, states at page 9:

As the Examiner is aware, a proper reason for a modification of the art cannot be avoided by mere reliance on Official Notice. Therefore, if the rejection is maintained, Applicant requires a reference... so that Applicant can determine whether the Examiner's purported reason to combine is further contradicted by said combination of references.

And so it came to pass: there is no proper reason to combine or modify. The Examiner's reason

to modify Ginsberg under the Official Notice Theory of the Final Rejection comes from non-analogous art, the Examiner's proposed modification is contradicted by Ginsberg (as discussed above re destroying the "real time barometer" object of Ginsberg), and this rejection is therefore improper as a matter of law. See the Brief under this section for relevant citations. Further, the argument was presented as timely as possible.

Additionally, at page 55 of the Answer, the Examiner states:

It is worth reviewing what Examiner took official notice of in rejecting claim 1: (a) that it is well known for output means (e.g., printers, monitors, modems) to be electrically connected to computers, (b) that it is well known to use digital electrical computer processors to manipulate electrical signals in manipulating data and performing calculations, and (c) that it is well known to electronically communicate the output of one computer to a second computer, which then stores the output in memory. There is no serious question of any of these being new inventions of Appellant.

The reason *Graham v. Deere* requires a proper "reason to combine" is to prevent exactly this type of rejection: pure hindsight from pieces of cited art. See Incorrect Application of Patent Statutes, above. Nothing in any or all of the Official Notice art would have led one to even try to modify Ginsberg to try to reach Appellant's claimed controlling or invention as a *whole*. Indeed, Ginsberg contradicts the proposed modification, as discussed in the Brief at pages 83-84 and left unanswered by the Examiner. A proper reason to combine is required by law, and the reason cannot come from stringing together Official Notice, especially based on non-analogous art.

Further, an index is not property, according to well settled court decisions. Additionally, Ginsberg is not modifiable into the claimed invention without a "real time barometer" object (i.e., changing / expiring bonds would mean a changing / expiring index), as the Examiner ignores in not answering this point at pages 83-84 of the Brief. These all show that the Examiner failed to make out a case of *pima facie* obviousness.

At page 55, the Examiner also argues:

nor yet of their being rare features which only a flash of brilliant inspiration could have led anyone to combine with Ginsberg.

Flash of brilliance is an improper legal standard for Sec. 103 obviousness, and so is the Examiner's piece-by-piece approach, rather than the correct legal standard of considering the invention as a *whole*. See *Incorrect Application of Patent Statutes*, above; see also Brief at pages 92-93. See further *Examiner's Opinions Are Irrelevant to Statutory Patentability*.

At page 55, the Examiner also argues:

they are standard features of commonly used computers and (in the case of (c)) systems of computers, likely not disclosed in Ginsberg only because Ginsberg, in applying for a business method patent, was not concerned with the details of the hardware used to carry out his invention.

Again, there is no such thing as a "business method" patent under Sec. 103 or Sec. 101, and the law applies equally to all method claims. See *Incorrect Application of Patent Statutes*, above. The Examiner failed to make out a *prima facie* case and is arguing that the law should not apply to this case.

At page 55-56, the Examiner also argues:

It might be possible to carry out Ginsberg's invention with an analog computer, or with a mechanical computer as conceived by Charles Babbage in the nineteenth century, possibly coupled mechanically to a manual typewriter, or to an apparatus for releasing carrier pigeons.

With all due respect, this argument is frivolous for the following reasons:

(1) Ginsberg teaches a real time system with a "sorting processor 950."

Analog computers cannot do sorting, or at least the Examiner has not shown so.

(2) Ginsberg teaches a "real time" system, which one cannot do with carrier pigeons, or at least the Examiner has not shown so.

(3) Ginsberg also teaches "real time" communications with the financial exchanges, displaying, and other things that cannot be done mechanically, or at least the Examiner has not shown so.

A patent should never be withheld for such an argument, and the Patent Office

probably would not want to see the Federal Circuit reaction to this.

The Examiner has failed to make out a *prima facie* case of obviousness with a proper reason to modify Ginsberg, and Ginsberg has not been shown modifiable either, neither with carrier pigeons, analog computers, nor mechanical computers. None of these provide a statutorily proper reason to modify Ginsberg, if the Examiner could even show that Ginsberg could be modified without destroying its “real time barometer” objective. More so, Ginsberg is an index, and courts hold that indexes are not property. Accordingly, the Examiner has not made out a case of *prima facie* statutory obviousness.

At page 55-56, the Examiner also argues:

such a person, if instructed to carry out Ginsberg's invention, would buy standard computer equipment with which to perform the job, and whichever common brand of computer he procured, the computer would use a digital electrical computer processor or processors to manipulate electrical signals in performing computations, and would use standard methods (such as an electrical connection) to link the computer to standard output devices (such as a printer, monitor, or modem).

How one would carry out Ginsberg is not the question. The question is whether the evidence shows that Appellant's claimed invention *as a whole* would have been obvious. See Incorrect Application of Patent Statutes, above. The Examiner has failed to find a proper reason to modify Ginsberg, at least because the use of non-analogous art to find the purported motivation is prohibited by the Sec. 103 requirement of “the art to which the subject matter pertains.” With regard to a combination of Ginsberg, the non-analogous art forms a contradictory mess that no one could ever imagine as having combinable teachings by one having ordinary skill in the art of finance. This kind of rejection could only come from hindsight inspired by Appellant's claims, which is prohibited.

At page 56, the Examiner also argues:

Examiner does not contend that one of ordinary skill in the art of finance would have been motivated to combine Ginsberg with "Decimal Point or Comma Printing in Multi-Cipher Digital Printers" in particular, or even to consider the "Decimal Point" patent in particular.

The Examiner concedes the impropriety of the cited art basis for a proper reason to combine/modify. The reason does not come from Ginsberg, which has not even been shown to be modifiable to value honest to goodness bonds (i.e., changing / expiring bonds would mean a changing / expiring index). The Examiner did not even attempt a response to this point, essentially conceding the point: compare the Answer with the Brief at pages 83-84. The Examiner also concedes that the motivation did not come from the art cited to support the Official Notice wherein the purported reason to modify is grounded. Assembling all sorts of equipment teachings, like a Decimal Point or Comma Printing in Multi-Cipher Digital Printers, a sine generator, an analog computer, and carrier pigeons, with Ginsberg does not suggest the particularly claimed method step of controlling. The only explanation for this incredible combination of unrelatable stuff is a hindsight of reconstruction of Appellant's claims, which constitutes an improper reason for the combination/modification.

At page 56, the Examiner also argues:

Appellant's complaints of non-analogous art are beside the point. In a case such as this, an invention involving distinct arts, those skilled in the art are those skilled in both arts, the adepts of each art carrying out the aspects proper to their specialty (*In re Naquin* 398 F.2d 863, 866, 158 USPQ 317, (CCPA 1968); *Ex parte Zechnall*, 194 USPQ 461 (Bd. App. 1973)).

In re Naquin and *Ex parte Zechnall* are Sec. 112 cases, not Sec. 103 cases pertaining to a determination of statutory obviousness. **The Examiner is relying on case law pertaining to the wrong statute.**

Accordingly, the Examiner's cases provide neither an exception to the law on non-analogous art as set out in cases cited in the Appellant's Brief (Appellant's cases do pertain to the correct statute) nor any exception to the Section 103 requirement that "the subject matter *as a whole* would have been obvious at the time the invention was made to *a person having ordinary skill in the art to which the subject matter pertains*." The Examiner determined that the relevant art is finance in the Final Rejection at page 49. Thus, the Examiner's use of Official Notice based on non-analogous art for finding a reason to modify Ginsberg is in error and fails

to make out a *prima facie* case of statutory obviousness.

At page 57 the Examiner concedes that the art cited in the Final Rejection is not analogous and switches theories to new Official Notice of “off the shelf computers.” But given Appellant’s priority date back to 1992, Applicant again requires evidence—not some nebulous assertion of how one might make Ginsberg. And laying out pieces of hardware alongside Ginsberg cannot teach or suggest a modification to the particularly claimed controlling of the hardware; and not just communicating any data, but the particularly claimed data, including the first valuation which is used by the second computer in generating the second market-based valuation as required in the claim *as a whole*--as discussed above and in this section of the Brief. See also, Incorrect Application of Patent Statutes, above.

At page 57, the Examiner also argues:

A less intransigent patent applicant would not have challenged Examiner's taking of official notice that it is well known to use digital electrical computer processors to manipulate electrical signals in manipulating data and performing calculations; however, Appellant challenged all of Examiner's takings of official notice, leading Examiner to find and make of record references supporting his takings of official notice.

Respectfully, Appellant objects to being called names like “intransigent.”

Appellant is completely within his statutory right to require a reference and to contend that the Examiner’s reason to modify Ginsberg cannot come from non-analogous art. Pursuant to 35 U.S.C. Sec. 103, the Examiner cannot withhold a patent, and should not come before the Board, with Sec. 103 art that the Examiner concedes is non-analogous (more so in now referencing to carrier pigeons, mechanical and analog computers, supplementing the other uncombinable art discussed in the Brief, etc.). See also, *Genus Does Not Prima Facie Establish Obviousness of Species or Subgenus*. As per Appellant's Response, the reason for requiring the references was to get at the *Graham* requirement of a proper reason to combine, which has not been shown. There is no reason for name calling before the Board or in any other PTO practice.

At page 57, the Examiner also argues:

Most patents and non-patent documents in the fields of finance and electronic commerce do not detail the internal workings of the computers used; there is no need for them to do so, since, following *Ex parte Zechnall* and *In re Naquin*, they are considered enabling without disclosing such details.

Again, enablement (*Zachnall* and *Naquin*) is not the question. This is an obviousness rejection—Sec. 103. The issue raised here in the Brief is whether the Examiner can properly find a reason for a combination/modification from the non-analogous art underpinning the Official Notice. Sec. 103 requires the Examiner to show that “the subject matter *as a whole* would have been obvious at the time the invention was made to a person having ordinary skill **in the art to which the subject matter pertains.**”

At pages 57-58, the Examiner also argues:

Appellant's view of analogous art is too narrow, in attempting to exclude computer technology references from being considered pertinent to an alleged invention in the field of finance, even though the claims recite particular features of computer technology. Granted, a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In the present case, Appellant's claim recitations of computer technology make references in the field of computer technology “reasonably pertinent” to the particular problem with which Appellant was concerned, especially considering that the primary reference, Ginsberg, discloses the use of a computer to implement his financial invention.

In reply, Appellant is not attempting to exclude all computer technology references, only those in non-analogous arts, such as analog and mechanical computers, etc. The particular art relied on by the Examiner in attempting to find a reason to combine/modify Ginsberg is not analogous art. Thus, pursuant to Sec. 103, the Examiner has failed to provide a proper reason for the combination/modification, and therefore has failed to make out a *prima facie* case of statutory obviousness.

The Examiner is correct that cited art must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed

invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). For this reason, the Examiner cannot lawfully premise a reason to combine/modify Ginsberg from the particular art selected to support the challenged Official Notice. There is no possible way that these particular art citations could be deemed “reasonably pertinent:” Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the ‘238. Thus, the art purportedly being used to find the motivation to modify Ginsberg is not “reasonably pertinent” to Appellant’s claims or to Ginsberg.

At pages 57-58, the Examiner also argues:

If Appellant's position regarding the allegedly non-analogous nature of the references used by Examiner to support his takings of official notice were accepted as patent law, various unjust and absurd results would follow. For example, a future applicant could apply for a patent on an automobile similar or identical to cars already on the road, and include in his claims such limitations as "wherein the workers who assemble said automobile are union members who receive health insurance as part of their compensation," or "wherein the rubber in said tires is at least partly manufactured from latex gathered from wild rubber trees in the Brazilian rain forest." Then, when a patent examiner cited a description of a car meeting most of the claim limitations as a primary reference, and used other documents to meet the limitations regarding labor relations or rubber gathering, the applicant could obtain a patent on the grounds that sources on labor relations, health insurance, and latex gathering are not analogous art for an application in the field of automotive engineering. Having obtained his patent, the applicant could then sue Ford and General Motors for infringement, since their cars are assembled by union members who receive health insurance, etc. Such a result would be no more absurd than allowing a patent on a claimed invention in the field of finance which differs from the nearest prior art principally in making explicit the electrical nature of the computers used in financial calculations.

Analogies are not the most reliable form of argument because situations can be distinguishable. In the Examiner’s analogies, “rubber in said tires is at least partly manufactured from latex gathered from wild rubber trees in the Brazilian rain forest” would seem to be essentially chemically identical to any other rubber, as would be the method of its manufacture, all in the context of the apparatus or method as a whole, as a properly formed obviousness rejection could presumably easily show *prima facie*. The situation is different with the

Appellant's claims, which are structurally and methodically different from, and not suggested by, the cited art. The same distinction applies to "cars are assembled by union members who receive health insurance," in contrast with the Appellant's claims.

The Examiner has presented no convincing reason to depart from statutory requirement and well-settled Federal Circuit case law regarding Sec. 103 prohibiting reliance on non-analogous art. The Examiner has relied on the combination of unspecified "off the shelf equipment, carrier pigeons, mechanical computers, Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the '238, to find a reason to modify the fixed income instrument index system of Ginsberg. Appellant maintains that this uncombinable mess does not teach or suggest that the "subject matter *as a whole* would have been obvious at the time the invention was made by a person having ordinary skill in the *art to which the subject matter pertains*." Further, resort to such art indicates a prohibited hindsight reconstruction inspired only by Appellant's claims. The Examiner has failed to make out a *prima facie* case of obviousness under the statutes and case law.

- (1) The Final Rejection is premised on an improper legal standard: Official Notice of each difference individually is an improper legal standard under Sec. 103 for evaluating the invention as a whole.**

The Examiner Answers:

Not wishing to expand this Examiner's Answer unduly, Examiner will not attempt a line-by-line rebuttal of Appellant's arguments on pages 97-102

In Reply, the Examiner is fogging over a complete failure to respond to a critical point in the Brief. See Incorrect Application of Patent Statutes, above.

As discussed in the Brief, the incorrect application of legal standards is a critical problem in the entire rejection, and this error requires overturning the entire rejection. The test is not whether each difference individually was obvious, as the Examiner has done here; rather

it is whether the invention *as a whole* would have been obvious. *In re Buehler*, 515 F.2d 1134 (CCPA 1975). 35 USC Sec. 103.

The Final Rejection has used Official Notice of individual, separate, and unrelated hardware possibilities as a reason to modify Ginsberg to carry out the method steps and structure suggested only by Applicant's claimed invention.

"A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art."

In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). The Examiner has not met this legal standard. Indeed, **the Examiner has not even responded to this issue and section in the Brief.**

Nothing in the cited art has "suggested the claimed subject matter" *as a whole*. Ginsberg is not even particularly relevant because Ginsberg's real time valuing of an index does not provide any methodology shown to be applicable to the claimed property (i.e., changing / expiring bonds would mean a changing / expiring index) and the bulk of the requirements in the independent claims; the Examiner has added Official Notice of individual and separate hardware possibilities (from non-analogous arts) *strung together with guidance only from Applicant's claims*, in a statutorily improper determination of obviousness. The Examiner's approach uses an improper legal standard for a case of obviousness, which is prohibited by *In re Buehler*, and despite the fog, is not even addressed by the Examiner in the Answer.

Not only because Ginsberg's index is not property, not only for the other reasons set out in the Brief and this Reply, but here particularly for using an incorrect legal standard of failing to consider the invention *as a whole*, this rejection must be reversed.

- (2) **There is no proper reason to modify Ginsberg because:**
 - i) **Official Notice based on non-analogous art cannot provide a proper motivation to modify**

other art.

This issue has been discussed above, because in the Final Rejection, the sole motivation for modifying Ginsberg comes from Official Notice. See Office Action pages 5-7. Applicant challenged the Examiner's use of Official Notice by requiring a reference to support the Official Notice, explicitly to assess the basis for the purported reason to modify Ginsberg. In response, the Examiner cited non-analogous art. This is an improper basis for finding a reason to modify, as a matter of law, and therefore a case of *prima facie* obviousness has not been made out. Withholding a patent based on Sec. 103 is improper, and the rejection must be reversed.

ii) Art / notice cannot be combined in the absence of any reason to combine / modify.

The Examiner has not responded to the point presented at pages 97-98, which therefore stands uncontradicted. Resort to Official Notice does not excuse the requirement for a proper reason to combine. No reason to combine/modify Ginsberg has been provided. For this particular reason, too (see Brief), the rejection must be reversed.

iii) There is no showing of a motivation for a non-obvious product of a material limitation.

The Examiner has not responded to this argument at pages 98-99 of the Brief, and this particular point is also determinative. Appellant strongly objects to the withholding of a patent where there has been no showing of a motivation for a non-obvious product of a material limitation, as set out in this section of the Brief. This too is a critical reason why the Examiner failed to make out a *prima facie* case of obviousness in the rejection. The Examiner did not and could not answer the issue, and it is an issue that is also dispositive for reversing the entire rejection.

iv) The theory of obviousness is not enabled by the cited art.

The Examiner has not responded to this point either, which therefore stands uncontradicted. But if the Examiner contends that something is obvious, one must obviously be able to carry out what is being contended. Here, the Examiner has not set out a theory of obviousness that is explainably doable, as discussed in the Brief at pages 99-100. The Examiner must be able to explain how one could do what is contended as “obvious,” and **the Examiner’s lack of response here is telling**. Something cannot be obvious if one is not enabled to do it. See also MPEP 2143.01. The Examiner failed to make out a case of *prima facie* obviousness for this reason too.

v) The proposed modification would destroy Ginsberg’s intent, purpose, and function.

At page 59 of the Answer, the Examiner states:

no such modification is needed to meet Appellant’s claim limitations. Instead, Ginsberg already discloses generating a second market-based valuation for the property (column 7, line 37, through column 9, line 51). The major modification of Ginsberg needed to meet the limitations of Appellant’s claim 1 is to have the second valuation generated at a second computer.

The Examiner appears to be arguing that “no such modification is needed” but that “the major modification in Ginsberg needed...” which is contradictory.

In reply, a modification is needed because Ginsberg is directed to an index, and an index is not property, according to the court decisions set out above. Further, the Examiner has not shown that the modification could be carried out because honest to goodness bonds change daily until they expire so as to defeat the “real time barometer” purpose of Ginsberg (i.e., changing / expiring bonds would mean a changing / expiring index). Beyond changing Ginsberg’s index valuation into one of property, the claims also require that the second valuation be carried out by the second computer using the input which includes the first valuation requirements detailed in the claim. None of this is suggested in Ginsberg nor the non-analogous art, and the modification proposed cannot be done for the reasons set out in this section of the Brief.

Further, here the Examiner is again switching theories from the Official Notice

Theory to the Network Theory, perhaps in combination with the Updated Index Theory. That is, Ginsberg does a first valuation of the index, and then updates it. Col. 9, line 20; line 50. The Examiner considers this “updated” (Col. 9, line 50) first valuation as the claimed second valuation of the second computer. The updated valuation is output to a network “in a manner analogous to the S&P 500 and Dow Jones 30 Industrials,” as just another first valuation with the Ginsberg computer. The updating does not suggest modifying Ginsberg into the method steps using different structure, input/output, with respective generating by a first computer and second computer respectively forming the claimed first valuation and the second valuation for the same property; and again, Ginsberg is directed to an index, and the courts have uniformly held that an index is not property. For these reasons, the Examiner has not set out a case of *prima facie* pursuant to Sec. 103 and the rejection therefore must be reversed.

At pages 59-60 the Examiner discusses “sales” as a claim requirement.

Appellant replies once again that the Examiner keeps missing the point. At page 102 of the Brief, Appellant states

“The Examiner misses the point. Applicant’s argument is not directed to another unaccounted claim limitation. Rather, Applicant’s point is that the Examiner’s reason to modify Ginsberg makes no sense.

Missing the point again, the Examiner does not answer the argument presented in the Brief at pages 100-104.

vi) The proposed modification is insufficient to explain all claim requirements.

In this section of the Brief, Appellant argued that a proper reason to combine or modify cited art must be sufficiently complete as to encompass the invention *as a whole*. The Examiner did not respond to this point, which therefore stands uncontradicted. However, the Examiner’s failure to consider the claim *as a whole* is central to the appeal, including failure to provide a proper reason for the purported modification of Ginsberg. See Incorrect Application of Patent Statutes, above.

The Official Notice and other art cited in support thereof has been improperly applied in the rejection because the test is not whether each difference individually is obvious, as the Examiner has asserted, but whether the invention *as a whole* is obvious. *In re Buehler*, 515 F.2d 1134 (CCPA 1975). Further, Official Notice based on non-analogous art cannot provide a proper motivation to modify other art, i.e., Ginsberg. The Examiner has failed to provide a proper reason to combine/modify the particularly cited art, if it could somehow be combined without contradiction and without destroying Ginsberg's "real time barometer" objective (i.e., changing / expiring bonds would mean a changing / expiring index), an issue which the Examiner did not answer (Pages 83-84 of the Brief). Further, the combination according to the Examiner's theories of obviousness are not enabled, even if anyone could figure out how to do the claimed invention according to the Examiner's theories. More so, the theory cannot account for certain method steps:

generating the second ... valuation ...for the property with the second digital electrical computer and the input;

Also, there is no disclosure of the claimed use of this step:

generating the second financial analysis output, including the second ... valuation, at an output means electrically connected to said second digital electrical computer

As to sub-group A1, there also is no disclosure of the second...valuation reflecting computation of a current market-based yield/discount rate...

With no disclosure of any of these individually, no combination of Ginsberg and the Official Notice and supporting art can render these obvious in the claim *as a whole*, even if some way could possibly be imagined to do everything the Examiner has proposed with all the Official Notice that has been concocted. No *prima facie* case of statutory obviousness has been made out because even if all the art were applied with all the Official Notice, modified for whatever reason as has been stated, the art still falls short because there is no disclosure of many claim elements. Furthermore, and in any case, Ginsberg's index is not property.

The Examiner's Official Notice-based reason to modify Ginsberg is insufficient to account for the above-mentioned claim steps, and the law requires that limitations in claims distinguishing over the cited art cannot be ignored. *In re Boe et al.*, 505 F.2d (CCPA 1974). The Examiner has not considered all claim limitations, and has not accounted for the claim as a whole. Thus, the rejection falls short of a case of *prima facie* obviousness pursuant to 35 U.S.C. Sec. 103 or the contemplation of the Supreme Court in *Graham v. John Deere Co.*, 383 US 1 (1966). Therefore, the rejection must be reversed.

With Ginsberg being directed to an index, and court decisions holding that an index is not property, the rest is academic. The rest is also academic because the Examiner has incorrectly applied the patent statutes and shown no proper reason for the modification, and in addition left many dispositive issues unanswered. The rest of this Reply clarifies the record to correct other contentions made in the record, any number of which are additional grounds for reversing the rejection.

2. Further as to claims 1, 8, and 14

a. Ginsberg's Treasury security is not tax-exempt.

The Examiner answers at pages 60-61:

Examiner never asserted that Treasury bonds were exempt from federal income tax, but that Treasury bonds are generally exempt from state taxes. Examiner also wrote that municipal bonds (disclosed by Ginsberg) are in many cases exempt from federal income tax. Either kind of bond could therefore be called "tax-exempt," depending on which tax is under discussion, although it is municipal bonds which are generally so described.

Implicit in this rejection is an interpretation of the claim. The claim requires wherein the property is from a group consisting of a tax-exempt security and a portfolio of tax-exempt securities. The claim does not require that the security be exempt from all taxes. Instead the claim requires a tax-exempt security.

In construing a claim, claims are to be given their ordinary meaning *as one skilled in the art would understand them* unless it appears from the specification that the terms

were used differently by the inventors. See, e.g., *Envirotech Corp. v. Al George, Inc.*, 730 F.2d 753, 759, 221 USPQ 473, 477 (Fed. Cir. 1984). See MPEP Sec. 2111.01. The Examiner has determined that the art at issue is finance. See the Final Rejection, page 49.

So, the question is: what is a tax-exempt fixed-income security to one having ordinary skill in the art of finance?

The Examiner contends that one having ordinary skill in finance would have thought that a tax-exempt security means a security exempt from either a state tax or a federal tax (i.e., "Treasury securities are generally exempt from state taxes, and municipal bonds are in many cases exempt from the federal income tax... Either kind of security could therefore be called "tax-exempt", Answer, pages 60-61).

Anyone having ordinary skill in the art of finance would know the Examiner's claim interpretation is wrong. The Board can take Official Notice for this assertion from any number of resources. Appellant offered the "Handbook of Fixed-Income" as suitable contrary extrinsic evidence that the definition of tax-exempt assets would be considered by those in the art to mean fixed-income assets that generate income that is exempt from U.S. federal income taxes. "The Handbook of Fixed-Income" is believed to be THE most widely used basic reference among finance professionals in the area of fixed-income, and the definition therein is well known and widely accepted by individuals with reasonable skill in the areas of fixed-income finance and investment.

The Board is authorized to take Official Notice of the use of terminology in the art. See, e.g., *Minnesota Mining and Manufacturing Co. v. Johnson & Johnson Orthopedics, Inc.*, 976 F.2d 1559, 24 USPQ 1321 (Fed. Cir. 1992).

Accordingly, Appellant submits that one having ordinary skill in the relevant area of finance would understand the claimed tax-exempt security to be a clear, precise, and well understood reference to a member of a particular class securities: those that generate income that is exempt from U.S. federal income taxes. Thus, the Examiner has not made out a *prima*

facie case of obviousness for rejection based on his alternative interpretation of the tax-exempt requirement of the claims.

Additionally, pursuant to *Texas Instruments Inc., v. USITC*, 988 F.2d 1165, 26 USPQ 1018 (Fed. Cir. 1993), the Board can also consider the meaning given the term in the specification. SCREEN 1 labels the taxable inputs. In particular, page 66, line 14, labels the Treasury rate input as "TAXABLE." The specification thus excludes Treasury bonds from the category of tax-exempt securities; in fact, the corresponding tax-exempt rate input belongs three lines above, on the line labeled, "AAA G.O. REMAINDER BASE."

Thus, the Examiner's interpretation of the claim conflicts with both the usage in the specification and the widely accepted definition of tax-exempt security. Therefore, Appellant submits that the Examiner's rejection depends on a misconstruction of the claim, in contradiction of the specification and in contradiction of ordinary usage in the relevant art of finance. Accordingly, the Examiner has not made out a *prima facie* case of obviousness, and the rejection must be overturned.

Appellant further asserts that the Examiner rejects the claims and definition of tax-exempt security implicit in the Specification without presenting an alternative definition. The above-cited paragraph from the Answer at pages 60-61 is the closest the Examiner comes to an alternative definition of tax-exempt security. However, that paragraph merely presents two examples of fixed-income securities that the Examiner considers to be tax-exempt with the corresponding rationale for assigning the tax-exempt attribute to each security: "Treasury securities (because they) are generally exempt from state taxes"; and "municipal bonds (because they) are in many cases exempt from the federal income tax." The Examiner continues in that paragraph that: "Either kind of bond could therefore be called "tax-exempt," depending on which tax is under discussion."

In the absence of a definition from the Examiner that presents a precise criterion for securities the Examiner would designate as tax-exempt, Appellant examines the specific

criteria the Examiner presents for the two types of bonds he designates as *tax-exempt* (the Answer, at page 61) for clues to the general criterion used for the Examiner's claim construction and rejection. Appellant asserts that the glimpse the Examiner gives of his general criterion for designation as tax-exempt implies that all bonds are tax-exempt, because every bond is exempt from some federal or state tax, e.g., federal liquor taxes, state sales taxes, and local real estate taxes. Thus, under the Examiner's claim construction, tax-exempt would be a meaningless attribute because it is all encompassing of bonds. The Board is welcome to take Official Notice that tax-exempt bonds are clearly not insignificant as a distinction to municipal governments, individual investors, and bond market professionals, and accordingly to relegate the Examiner's pseudo-definition to the oblivion it warrants. In any case, the Examiner has failed to make out a case of *prima facie* obviousness. Accordingly, the rejection must be overturned.

Appellant also calls the Board's attention to the sequence of events that led the Appellant to submit the definition of tax-exempt bond from "The Handbook of Fixed-Income" to support the application. Appellant intended the usual, customary, and standard definition of tax-exempt security to apply in the Specification. The Examiner rejected claim 1 in the initial Office Action, along with its dependent claims, without referring to the requirement of tax-exempt security(ies), but introduced this alternative pseudo-definition of tax-exempt in rejecting claim 14. Appellant respectfully cited the intended definition of tax-exempt in the Office Action Response, but in the Final Rejection the Examiner rejected the standard definition in favor of his ad hoc pseudo-definition. Accordingly, Appellant included an extrinsic reference supporting the assertion that the definition of tax-exempt is standardized ("The Handbook of Fixed-Income Securities") in the Appeal Brief, on the first occasion that the Appellant perceived the need in the Application for extrinsic support of a standard financial concept that is well understood by one with ordinary skill in the relevant art of finance.

Appellant asserts that, if the Examiner rejects the claims and the definition of tax-exempt introduced in the Appeal Brief, then the Examiner must set forth a clear claim

construction necessary to support the rejection by introducing his own definition of tax-exempt in the Answer. Thus, the Examiner's omission of a rebutting definition for tax-exempt from the Answer is significant because a claim interpretation is necessary for a rejection wherein the Examiner has the statutory burden of proof. This omission only makes sense if the Examiner recognized the inconsistency inherent in the rejection as described above and decided to minimize scrutiny of the rejection by omitting a definition of tax-exempt from the Answer. However, in view of the intrinsic and extrinsic evidence of the meaning of tax-exempt security, and absent a contrary definition submitted by the Examiner, a case of *prima facie* obviousness has not been made out; the rejection must be reversed on this ground too.

b. Ginsberg does not enable municipal bonds as the tax-exempt.

The Examiner answers at page 61:

Examiner responds that some adjustment of Ginsberg's disclosed methods would be obvious to one of ordinary skill in the art of finance reading his patent; Ginsberg certainly thought so, since he wrote "Treasuries ... are used exclusively in the following discussions, with the fundamental tenant [sic] that the principles may be applied to other types of fixed income securities without departing from the inventive concepts." (column 1, lines 50-55). The Patent Office evidently agreed with Ginsberg, since the claims in Ginsberg's patent do not contain any limitation that the securities must be Treasury obligations.

The Examiner should be careful in presuming that everything written in a patent specification is the gospel truth, inasmuch as the Patent Office has issued patents on perpetual motion machines. More to the point is whether the statutory burden for proving obviousness has been satisfied by evidence.

Building from the tax-exempt security claim construction discussion above, Appellant submits that the record is insufficient to show operability of Ginsberg to this species because Ginsberg teaches that a "defining criteria" is the default risk associated with this species, but offers no means for handling this risk. The Examiner recognized this hole in the teaching of Ginsberg, as discussed in this section of the Brief.

The Examiner asserts that "some adjustment of Ginsberg's disclosed methods

would be obvious” but does not indicate how it could be done or present any evidence that it could be done. Nor does Ginsberg, who points to this missing critical (i.e., “defining”) piece too, as discussed in the Brief. There is no evidence to plug the hole in the teaching of Ginsberg, and thus there is an insufficient showing of operability for a case of *prima facie* obviousness.

More particularly, the Examiner acknowledged that “Ginsberg does not disclose taking non-zero risk into account,” etc., as discussed in this section of the Brief. The record does not show that anyone in the world knew how to make the adjustments asserted as obvious by the Examiner as of the 1992 priority date of the instant application, nor does Appellant believe that anyone knows how to make such adjustments at the present time.

It takes more than the Examiner’s assertion that “some adjustment of Ginsberg’s disclosed methods would be obvious” to meet the evidentiary burden of proving *prima facie* obviousness under Sec. 103 in view of Ginsberg’s undisclosed “defining” piece.

There is an additional reason why the invention *as a whole* cannot be viewed as obvious under the Examiner’s particular theory alleged in this part of the Rejection. Here, the Examiner switches to still another theory for the first computer...generating the first market-based valuation, the “market data” (“Market Data Theory”). See Answer, page 62, line 18. However, under the Market Data Theory, the “market-based valuation” cited by the Examiner is actually a market-determined valuation, i.e., the most recent transaction price available for the property. There is no reason to believe that this type of market-determined value was generated by any computer system whatsoever, let alone the Ginsberg system.

But for this aspect of the claim to be obvious, one needs to have this input for the claimed species. And because Ginsberg’s objective was a “real time barometer,” one would have needed this input in real time. However, as to the municipal bond tax-exempt species, the Examiner has not shown that at the time of Appellant’s priority date in 1992, the market data input could have been obviously obtained. So far as Appellant is aware, real-time market prices were not available for tax-exempt securities in 1992. In fact, illiquidity was a primary attribute of

the tax-exempt bond market at the time, which challenges the feasibility of Ginsberg being enabling for tax exempt bonds. Ginsberg's "real time barometer" object makes no sense in connection with illiquid assets, and without a showing that real-time inputs were obviously feasible in 1992, the Examiner has not met the threshold burden for providing that, at the time of Appellant's invention, Ginsberg could enable a "real time barometer" in the case of the tax-exempt bond market.

The Examiner has not filled in the missing hole that Ginsberg teaches as "defining," and thus has not shown *prima facie* operability of this species, but more so, there is an absence of a showing of how to get the real time market data corresponding to the Market Data Theory. Further, without a showing that the claimed invention could have been done with the technology available at the time of Appellant's priority date in 1992, the Examiner simply has not provided sufficient evidence to make out a case of *prima facie* obviousness. For this reason too, the rejection must be reversed.

3. Further as to claims 4, 6, 10, 12, 32, 34, and 40

a. Incorporate by reference A1, and Ginsberg is not enabling for corporate debt.

The Examiner argues essentially the same point as above with regard to corporate bonds, but adds at page 62:

modifications to Ginsberg's expressly disclosed method to deal with securities that had a non-zero risk would be within the capacity of one of ordinary skill in the art of finance at the time of Appellant's invention. There are, after all, services which rate bonds, with bonds believed to carry higher risk paying correspondingly higher interest rates, or selling at discounts reflecting the perceived risks.

In reply, it is respectfully submitted that one having ordinary skill in the art of finance would know that bond ratings consist of a series of letters, sometimes followed by plus or minus signs, to indicate relative risk, not a quantitative default risk that could be incorporated into Ginsberg as the "defining criteria."

More particularly, although bond ratings are intended to indicate relative risk (e.g., the AAA rating is intended to indicate relatively lower risk than the AA rating), there is apparently no known way to translate the relative risk rating letters into quantitative risk premia to support real-world bond issuance or trading without some other way to capture information about many risk factors outside the letter rating system, such as liquidity risk, industry risk, specific organization risk, individual bond covenant risk, etc, in the "defining" default risk that Ginsberg leaves as a hole in the disclosure. In any case, the Examiner has not met the evidentiary burden of a showing of *prima facie* obviousness preceding Appellant's 1992 filing date.

The Examiner's statement that "modifications to Ginsberg's expressly disclosed method to deal with securities that had a non-zero risk would be within the capacity of one of ordinary skill in the art of finance" is a subjective personal assertion, not evidence. And the assertion is not explained or supported by any citation of prior art.

Appellant submits that the record is insufficient to show operability of Ginsberg to this species because Ginsberg teaches that a "defining criteria" is the default risk associated with this specie, but offers no means for handling the risk. Furthermore, the Examiner acknowledges this hole in the teaching of Ginsberg, as discussed in this section of the Brief, but has not filled the hole.

An additional reason is that, when considering the claim *as a whole*, under the Examiner's Market Data Theory, there has been no showing of the feasibility of getting the real time market data input to Ginsberg. For this Theory to be valid, one needs to be obviously able to get this input in 1992, the year of Appellant's priority date. And because Ginsberg's objective was a "real time barometer," one would have needed this input in real time. However, as to corporate debt, the Examiner has not shown that in 1992, input would have been obviously obtainable. In particular, the Examiner has not shown that real-time market prices would have

been obviously available in 1992 in the case of corporate debt. Accordingly, the Examiner has not shown that Ginsberg is enabling as a "real time barometer" in the case of corporate debt.

To summarize, the Examiner has not filled in the missing hole that Ginsberg teaches as "defining," and thus has not shown *prima facie* operability of this species, especially in the absence of a showing of how to get the real time input. Further, without a showing that the claimed invention could have been done with the technology available at the time of Appellant's priority date in 1992, the Examiner simply has not provided sufficient evidence to make out a case of *prima facie* obviousness. Accordingly, the rejection must be reversed for this reason as well.

4. Further as to claims 64, 66, and 226, 228

- a. Incorporate by reference A1, and also there is no financial analysis output having the system-determined purchase price for the property in consummating the sale.**

In response to Appellant's point that the claims of this Group all require a system determined purchase price in consummating a sale for the claimed property, which is not shown by Ginsberg at least because Ginsberg's index is not property, the Examiner answers:

Ginsberg discloses the delivery of actual securities to be delivered pursuant to the futures contract, where the actual securities to be delivered are chosen by scanning the market (column 10, lines 8-19), and these actual securities may be among the property for which the market was already scanned (column 4, lines 30-67) in performing Ginsberg's market-based valuation for property (column 4, lines 30-67; column 5, lines 34-63). Therefore, Ginsberg's system-determined purchase price for property can be for the same property for which the market-based valuation was generated.

In lines 16-19 of the Answer, the Examiner uses the Market Data Theory of the first computer doing the first market-based valuation. That is, the Examiner states that the Ginsberg system obtains valuations for actual securities by "scanning the market" (line 18), and thus not by the claimed system computer...generating the first market-based valuation, as claimed and discussed above.

The Examiner is switching theories because Ginsberg's index system is not performing a market-based valuation of actual securities, as the Examiner implicitly acknowledges in the above quote. Instead, Ginsberg is using the market data as input to his valuation of the real-time index, which is not property.

However, as discussed above concerning the Market Data Theory, the "market-based valuation" cited by the Examiner is actually a market-determined most recent transaction price available for the property. There is no reason to support the Examiner's assertion that this type of market-determined value was generated by any computer system whatsoever, let alone the Ginsberg system.

Furthermore, the securities corresponding to the market data input are not the same as the "real time index" that is subject to a Ginsberg valuation, and are not the same as the options contracts and the futures contracts of interest to the end users of the Ginsberg system. Ginsberg's system is therefore fundamentally different from the auction-oriented systems described in Appellant's claims. See MPEP Sec. 2143.

Whatever the Examiner's theory-du-jour may be for the claimed first computer and second computer, input/output, property, and valuations, the Examiner's evidence does not teach or suggest Appellant's claimed method. In sum, Ginsberg does not teach a system determined purchase price in consummating a sale of the same property as required in the method steps. Accordingly, a *prima facie* case of obviousness has not been shown, and the rejection must be reversed for this reason too.

B. Incorporation by reference: A1 and further, Ginsberg, Lupien, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 57-63

- a. No cited art even mentions the claimed offering document or any means or method whatsoever for generating the financial analysis output including the offering document.**

At page 63, lines 16-17, the Examiner concedes that "Appellant has defined

'offering document' as something which Lupien clearly does not teach." Thus, the rejection must be reversed. The rest of this discussion is to clarify the record.

The Examiner answers at page 63 that:

in examining the claims, it is proper to give them the broadest reasonable interpretation. Thus, *an offer to sell securities could be read as an offering document*, as the claims in question do not recite any explicit limitation that the offering document must be an offering document according to the Securities Act, relating to the issue of new securities... (Italics Added)

The operative word here is "reasonable."

In a proper construction of the claims, claims are to be given their ordinary meaning *as one skilled in the art would understand them* unless it appears from the specification that the terms were used differently by the inventors. See, e.g., *Envirotech Corp. v. Al George, Inc.*, 730 F.2d 753, 759, 221 USPQ 473, 477 (Fed. Cir. 1984). See also MPEP Sec. 211.01. In the instant case, the Examiner has determined that the art at issue is finance. See the Final Rejection, page 49.

Thus, the question is whether one having ordinary skill in finance would believe, as the Examiner alleges, that "*an offer to sell securities*" could be read as the claimed generating the financial analysis output including the offering document. See Answer at page 63, lines 9-10.

Pursuant to *Envirotech Corp.*, the Board can look to extrinsic evidence such as securities laws to see that offering document has a well known and often used meaning. This meaning is consistent with other references in the art that the Board can use for Official Notice, as cited in the Brief, e.g., a Federal Reserve Board regulation. This is the vocabulary of the art of finance.

On the other hand, the Examiner has not shown that his interpretation is reasonable, or that anyone having ordinary skill in the art would consider "*an offer to sell securities*" in connection with as the claimed generating the financial analysis output including the offering document. The Examiner's claim interpretation is in the nature of a *bon mot* or play

on words, i.e., if one makes an offer of anything in writing, a person in finance would think it was an offering document. This is cute, but the Examiner has not shown that this claim construction is reasonable in the context of the claims as a whole to one of ordinary skill in the art of finance.

Additionally, pursuant to *Texas Instruments Inc. v. USITC*, 988 F.2d 1165, 26 USPQ 1018 (Fed. Cir. 1993), the Board should consider the meaning given the term in the specification, for example, in Specimens 5 and 6. The Examiner's claim construction is likewise contrary to the teaching of the specification.

As previously stated, the operative word in claim interpretation is "reasonable," and the Examiner is not "reasonable" in twisting the claim language into something contrary to ordinary use in the art of finance and contrary to the use in the specification of the instant patent application. A misconstrued claim is no basis for a *prima facie* case of obviousness.

Continuing on, the Examiner states, at page 63 of the Answer:

(in fact, the claims originally used the term "offering memorandum" rather than "offering document," until Appellant made the change by an After Final Amendment). Moreover, Appellant did not create file wrapper estoppel by narrowly defining "offering memorandum/document" in his response to Examiner's non-final rejection. Only now has Appellant defined "offering document" as something which Lupien clearly does not teach, raising the issue of whether other art, such as the Securities Act of 1933, could be used to establish that offering documents, narrowly defined, are well known.

Frankly, Appellant does not understand the Examiner's thinking here. It is well known to one having ordinary skill in the art of finance that "offering document" is more general than "offering memorandum." In other words, if anything, Appellant broadened the claim language rather than narrowing it. Nevertheless, the *bon mot* claim interpretation is no longer feasible. Whatever the Examiner is contending here, Lupien does not teach or suggest the claimed generating the financial analysis output including the offering document.

Appellant notes that the Examiner concedes: "Only now has Appellant defined offering document as something which Lupien clearly does not teach." Page 63, lines 16-17. Accordingly, the Examiner has given up on Lupien and all rejections stemming from it and

"offering document."

The Examiner goes on to say that this amendment raises "the issue of whether other art, such as the Securities Act of 1933, could be used to establish that offering documents, narrowly defined, are well known."

In response, this is more of the Examiner's use of the wrong legal standard, twisting claim language, and twisting factual theories to attempt to make a piece-by-piece obviousness case, as contrasted with considering the invention *as a whole*, as required by statute. See Incorrect Application of Patent Statutes, above.

Of course, Appellant did not invent an offering document, and respectfully, the Securities Act of 1933 should not be a stunning revelation that offering documents are well known. Equally evidently, nothing in the Securities Act of 1933 teaches how to build a computer system capable of generating the financial analysis output including an offering document. The claimed digital electrical computer had not been invented yet. The combination *as a whole* including generating the financial analysis output including an offering document has not been shown obvious back to the priority date in 1992. Certainly no one would think of it in connection with Ginsberg's index, not the least because courts have held that an index is not property. Also, pursuant to the Securities Act of 1933 and common sense, an offering document is not issued in connection with an index valuation.

Moreover, in the Answer, at page 63, lines 7-9, the Examiner has ignored Appellant's explanation about why Lupien cannot be construed to disclose an "offering document" and incorrectly continues to contend that Lupien's sales implicitly disclose an offering document.

If a person purchases a newspaper from a mechanical newspaper dispenser, then clearly the owner of the newspaper dispenser cannot implicitly disclose an offering document being provided for the product, because no document accompanies the newspaper that the person removes from the dispenser. Thus, the Examiner must be contending that there

is some attribute of securities products that implies an offering document in connection with a securities sale.

U.S. securities law requires the issuance (and delivery to the buyer) of offering documents in the case of registered securities that are being offered for sale under some circumstances (e.g., initial public offerings). The securities law also specifies minimum information disclosure requirements for such documents. However, as discussed in this section of the Brief, the law expressly waives the offering document requirement in the case of securities that are being traded on financial exchanges. Because Lupien is concerned with secondary trading of securities on financial exchanges, Lupien cannot implicitly disclose an offering document.

In sum, the Examiner concedes that "Appellant defined offering document as something which Lupien clearly does not teach." Page 63, lines 16-17. The ubiquitous use of the wrong legal standard in a Sec. 103 analysis notwithstanding (i.e., failure to consider the invention *as a whole*), the Examiner has not made out a *prima facie* case of obviousness. Therefore, the rejection must be reversed for this reason too.

b. No cited art teaches or suggests the claimed controlling a computer... to compute a system-determined purchase price for the property in consummating a sale.

The Examiner completely failed to address the three points at pages 119-120. The Board is directed to these pages which remain uncontradicted. In view of the Examiner's admission, at page 63, lines 16-17 of the Answer, that Lupien does not teach this element in the claim, the Examiner's evidentiary showing is insufficient for *prima facie* obviousness, anyway.

c. **There is no proper reason to modify or combine.**

The Examiner completely failed to address this point at pages 120-121 of the Brief too. The Board is again directed to these pages, which remain uncontradicted. In view of the Examiner conceding that Lupien does not teach the claim element discussed in Sec. B(1)a above, the rejection of claims 57-63 must be reversed. Section B(1)c also provides reasons for

reversing the rejection. Further, this point regarding no proper reason to combine or modify stands unopposed and uncontradicted by the Examiner, more so because Ginsberg pertains to an index and courts do not consider indexes as property. As per this section of the Brief, there is no proper reason to modify or combine, and thus, no *prima facie* case of obviousness, as well. Thus, the rejection must be reversed for this reason too.

2. Further as to claims 59 and 61

a. Incorporate by reference A1, and Ginsberg is not enabling for corporate debt.

The Board is directed above to section A(3)a generally concerning lack of enablement in Ginsberg for corporate debt, generally.

Further, the Examiner did not respond to the point that claims are to be considered *as a whole*, so that the context of the argument is somewhat different here. In particular, note the point raised in section A(3)a above regarding the absence of a teaching of the input upon which the Examiner relies in one of his theories of the first generating step, in connection with the invention *as a whole*. However, the common point is that the Examiner has failed to set out a case of *prima facie* obviousness for these claims *as a whole*. Thus, the rejection must be reversed for this ground as well.

3. Further as to claim 63

a. Ginsberg's Treasury security is not tax-exempt.

The Board is directed above to section A(2)a concerning claim interpretation and Ginsberg for a Treasury as the tax-exempt debt, generally.

The Examiner again did not respond to the point that claims are to be considered *as a whole*, so that the context of the argument here is somewhat different because the claim is a different "whole." However, the common point is that the Examiner has failed to set out a case of *prima facie* obviousness for the invention *as a whole*. Thus, the rejection must be reversed for this reason too.

b. Ginsberg does not enable municipal bonds as the tax-exempt.

The Board is directed above to section A(2)b concerning lack of enablement in Ginsberg for municipal bonds.

The Examiner did not precisely respond to the point that claims are to be considered *as a whole*, so that the context of the argument here is somewhat different because the claim is a different "whole." See Sec. A(2)b too concerning the absence of a showing of the input required for the Examiner's theory of the first generating step. However, the common point is that the Examiner has failed to set out a case of *prima facie* obviousness for the invention *as a whole*, and the rejection must be reversed.

c. Summary.

In sum, Ginsberg's Treasury security is not tax-exempt in accordance with the rules of claim construction discussed above, the Examiner has not shown that municipal bonds were obviously enabled, and thus the Examiner has not made out a *prima facie* case of obviousness concerning the tax-exempt requirement of the claims in this group. Thus, the rejection must be reversed.

C. Incorporation by reference: A1, and further, Ginsberg, Coughlan, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. Claims 43, 45-56, 67, 96-101, 104-111, 116-117, 158, 229

The Examiner has not responded to this portion of the Brief, and the Board is directed to pages 125-126. In particular, the Examiner did not respond to the points that: the combination does not teach the method steps in the context of a claim *as a whole*; the particular use of Official Notice in the Final Rejection cannot serve as a reason to modify Ginsberg to make up half of the claimed invention; the Official Notice is premised on non-analogous art; the combination is formed for insufficient reason, in a way that makes no sense, would destroy and render Ginsberg inoperable for its intended purpose, intent, and function; and even so, does not

account for all the claim limitations. Therefore, the Examiner has failed to make a case of *prima facie* obviousness, and the rejection must be reversed on this ground as well.

a. **There is no teaching of the claimed valuation reflecting... a quantitative description of risk.**

As to this point, first, the Examiner failed to provide any teaching of a valuation of property, especially wherein the valuation is carried out reflecting... a quantitative description of risk. These requirements must be considered *as a whole*, which the Examiner has failed to do.

The Examiner concedes at page 64 that “Coughlan does not expressly teach a valuation. So the Examiner’s case is that “Ginsberg does disclose performing a valuation.” A problem with the Examiner’s case is that the claim requires more than any valuation: the claim requires a valuation of property, Ginsberg pertains to an index, and courts recognize that an index is not property. See Brief at page 128, paragraph 2. Another problem with the Examiner’s case is that the valuation must be carried out reflecting...a quantitative description of risk, which no cited art teaches. Therefore, the Examiner has not made out a *prima facie* case of statutory obviousness.

Further, the Examiner did not answer the point in the Brief at pages 83-84 that no one would attempt to modify Ginsberg to handle honest to goodness bonds because one having ordinary skill in the art would know that instead of a having Ginsberg’s “real time barometer,” the result would be that bonds would be changing each day until they expire, along with the daily changing and subsequent expiration of the index.

More so, at the top of page 65, the Examiner concedes that Coughlan teaches “quantifying risk” as output. However, the claim requires a quantitative description of risk as input for the valuation. This disconnect is more of the failure to consider the invention *as a whole*. See, Incorrect Application of Patent Statutes, above.

The Examiner next argues that Coughlan’s output is “consistent with Ginsberg’s quantitative description of risk.” However, there is no quantitative description of risk in Ginsberg. As stated by the Examiner, “Ginsberg does not expressly disclose the step of controlling is carried

out with a quantitative description of risk,” at page 12 of the Answer.

In any case, Coughlan's output is not a teaching of the claimed use as an input in producing a valuation. See Brief at page 128, paragraph 3.

At page 64, the Examiner states that “the training module implies...” and concludes that “techniques were known.” The Examiner consistently exceeds the evidence in handling this patent application, here in going from the singular technique disclosed in Coughlan to what the Examiner alleges as “techniques” *plural*. Evidence is required for proving obviousness. Coughlan’s “Financial add-ins lighten load of 1-2-3 Users,” is a “training module for midlevel bank people.” Coughlan is the only evidence that the Examiner has presented on this element of the claim *as a whole*, and this evidence is inadequate.

The Examiner did not answer the point in the second paragraph on page 127 that the proposed combination leads to an unworkable approach insofar as using a quantitative description of risk contradicts using the interest rate/hypothetical index approach of Ginsberg. See MPEP Sections 2143.01 and 2143.02; for these reasons too, the rejection must be reversed.

In the Answer at page 64, lines 12-15, the Examiner concedes that Coughlan only discloses quantifying risk as output, not as the claimed input, and Coughlan is not even in the context of forming a valuation therefrom, and especially not in the context of a valuation of property reflecting... a quantitative description of risk. And in the end, again, Ginsberg is an index, and courts do not view indexes as property. This rejection must be reversed as it is not even close to a case of *prima facie* obviousness.

b. No reason to combine.

Although the Examiner asserts justification for combining Coughlan and Ginsberg, this section of the Brief presented at least two prohibitions against the proposed combination or modification of Ginsberg, in view of Coughlan, and the Examiner failed to respond to the first reason. That is, the Examiner failed to respond to the fact that the proposed combination is contradicted by the respective teachings. See Brief at pages 127 (paragraph 4) to page 129

(paragraph 4). See MPEP Sec. 2143.01. Therefore, the rejection must be reversed on the first and uncontested reason.

The second reason that the proposed combination is prohibited is that the proposed combination would destroy the intended function of the cited art (i.e., changing / expiring bonds would mean a changing / expiring index). In the Answer at page 65, lines 6-11, the Examiner disputes Appellant's assertion that the Coughlan risk measure is unconnected with a valuation or the present invention, and further contends that Appellant is being inconsistent. Appellant replies that the Examiner has not refuted the point set forth at pages 129-131 in the Brief. Further, the Examiner has not shown any inconsistency in Appellant's assertions in the Answer at page 65, lines 7-10. The Examiner's confusion seems to reflect an unwillingness to acknowledge that indexes are not considered property, as per the court decisions cited above. Having Ginsberg's index reflect a quantitative description of risk, as suggested by the Examiner, is even more farfetched.

Also, at page 65, lines 7-11, the Examiner cites claim 1 of the instant application as evidence of an Appellant inconsistency, but Appellant replies that claim 1 applies to tax-exempt assets, which always have default risk, and which are not the subject of the index enabled in the Ginsberg specification, as discussed in Sec. A1(2)a of the Brief and the Reply, above.

Furthermore, at line 11 the Examiner states that "Ginsberg discloses beginning with a market-based valuation for actual property...." This is the Examiner's switching to the Market Data Theory as discussed above, but this also demonstrates the Examiner's confusion between another input and output. The Ginsberg invention uses market data as input in generating a series of interest rate values for an index (which, Appellant again observes, is not property). Appellant's invention is directed to controlling a computer ... in generating a market-based valuation of property...with the valuation reflecting...a quantitative description of risk as output and then using that particular output as input for a second computer to use in generating

the second market-based valuation of the same property. Once again, output is not input, nor does output constitute a teaching of the claimed use of the input.

Finally, Appellant again observes that the Market Data Theory, which the Examiner is using at page 65, line 10 of the Answer, actually uses a market-determined, most recent transaction price available for the property. There is no reason to assert that this type of market-determined value was generated by any computer system whatsoever, let alone the Ginsberg system.

In the Answer, at page 65, lines 14-16, the Examiner states that, "An application of Ginsberg's principles to other types of fixed income securities, with substantial default risks, would presumably involve taking the default risks into account." The Examiner is correct, but the big question is: how? Presumably the reason the detailed embodiment in Ginsberg is explicitly and pointedly limited to U.S. Treasury fixed-income obligations is that, as with other individuals familiar with finance, Ginsberg did not know how extend the methodology of his invention to derive quantitative measures of default risk premia from recent transaction prices in the case of fixed-income assets that have default risk, such as tax-exempt assets. In fact, Appellant is not aware of anyone who has overcome this obstacle, and the record does not show that anyone knew how to overcome this obstacle prior to Appellant's priority date in 1992. In order to establish obviousness, the Examiner is required to provide some explanation as to how one could handle what Ginsberg mentions as a "defining criteria" that is missing in his disclosure, and furthermore how to do so in the "real time" of Ginsberg's explicit intentions.

In reply to the Examiner's comments at page 65, line 16 - page 66, line 11, as observed in the Brief, Appellant does not dispute that investors should understand the risks involved in purchasing an item of property. Appellant does dispute the relevance of that assertion to relating the cited art in the application to the instant claims. More so, the Examiner points to Moody's as a bond rating service, and mentions such services for bank assets. Once again, Moody's ratings are relative rankings presented in the form of letters, such as "AA

bonds,” not a teaching of the claimed use of a quantitative description of risk.

The Examiner comments on “a reason to combine,” at page 66, do not answer the first point in the Brief that combination is contradicted by the teachings themselves and would destroy the intended function of the cited art, as set out in this section of the Brief. The Examiner's comments on the second reason are neither a case of *prima facie* obviousness nor persuasive for the reasons set out above.

In sum, the Examiner never addressed the first reason set out in the Brief as to why the Examiner's proposed combination is prohibited, i.e., contradiction in the teachings themselves. The Examiner made many comments but has not really addressed the second reason either, i.e., that the combination would destroy the intended function of the cited art, i.e., the “real time barometer” of Ginsberg. Further, the Examiner's arguments, premised on not knowing that Moody's relative letter ratings are not a quantitative description of risk, confuse input market prices of Ginsberg with Appellant's computer system generating a first market-based valuation as output that is input to a second computer that generates a second market-based valuation in the particularly claimed manner and pertaining to the same property. By skipping one reason why the combination is prohibited, and making mistakes concerning the other, the Examiner has not overcome either of the two reasons set forth in the Brief that the proposed combination / modification is improper. Thus, the rejection must therefore be reversed.

2. As to claims 96-101, 104-111, 116-117, there is no teaching of a second member of the group.

a. No reason to combine.

At page 66, the Examiner contends that “Ginsberg does teach a valuation reflecting price.” These claims depend from claim 64, and thus require controlling... a computer...in generating a market-based valuation for the property.... Again, Ginsberg is valuing an index, and courts have held that an index is not property. Therefore, a valuation of an index is not a valuation of property. At this point in the case, the Examiner switches theories

to the Market Data Theory, i.e., the theory that the “market data” that is collected as input to Ginsberg’s computer system is the first computer generating the market-based valuation for the property. However, as stated above, this is actually a market-determined, most recent transaction price available for the property. There is no justification for believing that this type of market-determined value is the result of controlling... a computer...in generating a market-based valuation for the property..., and the Examiner has not met the statutory burden of proof about Ginsberg’s index valuation as pertaining to the second valuation of the same property.

Second, the claim requires that this controlling... be carried out with both price and a quantitative description of risk. In the case of the Examiner’s Market Data Input Theory, no one can know how the market prices input to Ginsberg’s index system were formed, though it seems unimaginable that one would have done them according to the teaching of the bank training module of Coughlan. In any case, Coughlan does not teach a valuation of the property...reflecting a quantitative description of risk, as discussed above in Section C(1)a.

Third, the claims require a second computer, which apparently the Examiner considers to be the Ginsberg system. But the claim further requires using this second computer in generating... a system determined purchase price for the property. Ginsberg does not determine a purchase price for whatever property was used in producing the “market data” input to Ginsberg, so the Examiner’s argument fails here too. Ginsberg’s computer also does not do the generating...in consummating a sale of the property that was the subject of the market-based valuation. Ginsberg’s valuation concerns the “real time” index, and as stated above, courts have held that indexes are not property.

Accordingly, the Examiner has not shown the claimed second member of the group, and even more so because Coughlan does not teach a valuation of the property...with the valuation...reflecting a quantitative description of risk.

Fourth in the Answer, at page 64, lines 12-15, the Examiner concedes Appellant’s assertion in the Brief that Coughlan only discloses risk quantification as an objective,

i.e., as output. The Examiner then incorrectly asserts that Ginsberg uses a quantified risk measure as input (see Answer, page 65, line 2; see refutation above), and further incorrectly continues to assert that evidence justifies combining Coughlan and Ginsberg (see Section (2)a in the Reply). These errors underpin the erroneous contention that such a combination is justified and would teach or suggest all requirements of the claims. With regard to this erroneous contention, Appellant reiterates the observation in the Brief that Ginsberg only mentions default risk in the course of noting its absence, and furthermore that disclosing the absence of risk is not the same as disclosing how to handle a quantitative description of risk in carrying out a valuation, especially of the property. Coughlan does not teach this element either, as discussed above. The Examiner therefore has not refuted Appellant's points in this section of the Brief.

Additionally, the Examiner has not answered the subject of this section of the brief: there is no proper reason for the Examiner's proposed combination. The Board is referred to this section of the Brief for this point, which by itself compels reversal.

3. As to claims 97, 99, 101, 105, 107, 109, 111, and 117

At page 67, the Examiner objects to the definition of risk-free rate presented in the book Investments, by William Sharpe et al., 1995 ed., presented with the Brief. The Examiner asserts that his personally made-up definition should take precedence as being more reflective of what would be reasonably understood by one having ordinary skill in the art of finance than the definition in the Sharpe et al. text that was "introduced only upon appeal of a final rejection."

On the question of claim interpretation, Appellant responds that the Board is welcome to take Official Notice from other sources on this issue of claim interpretation. However, the Sharpe book is well known as the latest edition of an introductory text for business school first courses in investment theory, as one having ordinary skill in the art would most certainly recognize, because the Sharpe book has been the most widely used introductory

investment theory text for more than two decades. Appellant did not define the term earlier because the definition is familiar to business school graduates nationwide. Appellant only presented the definition in the Brief to correct the Examiner's misconceptions about a basic concept in finance. The Board is welcome to take Official Notice of other sources indicative of the plain and ordinary meaning of the terms in the claim, as would be reasonably understood by one having ordinary skill in the art.

As set out already, in a proper construction of the claims, claims are to be given their ordinary meaning *as one skilled in the art would understand them* unless it appears from the specification that the terms were used differently by the inventors. See, e.g., *Envirotech Corp. v. Al George, Inc.*, 730 F.2d 753, 759, 221 USPQ 473, 477 (Fed. Cir. 1984). See also MPEP Sec. 2111.01. And pursuant to *Envirotech Corp.*, the Board can look to extrinsic evidence to see that the term has a well known and often used meaning.

On the other hand, the Examiner has not shown that his interpretation is “reasonable,” or that anyone having ordinary skill in the art would even consider his definition. In the Answer at page 67, lines 14-20, the Examiner incorrectly contends that Ginsberg discloses the risk-free rate because some of the interest rates in Ginsberg should satisfy the definition presented in the Sharpe book. But because Ginsberg does not mention “risk-free rate,” the Examiner must believe that Ginsberg discloses interest rates that in fact are risk-free and discloses their risk-free characteristics.

Ginsberg discloses interest rates that in fact are risk-free (although Ginsberg does not identify the interest rates as risk-free nor does he identify their risk-free attributes). In fact, the main output of the Ginsberg invention is a set of real-time risk-free interest rates that Ginsberg intends to be used primarily by options and futures traders to refine the real-time valuations of financial derivatives they use in real-time trading of options and futures.

The problem with the Examiner’s assertion is that, once again, the Examiner confuses common financial terminology along with confusing output and input, and thus the

associated cooperation of elements in the claimed invention *as a whole* have not been shown. Ginsberg's risk-free interest rates are outputs, whereas Applicant's claims involving risk-free rates require the risk-free rates as input. For this reason too, the Examiner has failed to establish *prima facie* obviousness based on the evidence, and the rejection must be reversed.

4. As to claims 98-101

a. Incorporate by reference C1, and not enabling for corporate debt.

The Examiner prefers not to repeat his previously recited argument. However, enablement in the context of one claim is not necessarily enablement in the context of another claim, and the claimed invention must be considered "as a whole" pursuant to 35 U.S.C. Sec. 103. The Examiner's prior argument was directed to a different claim set (i.e., claims 4, 6, 10, 12, 32, 34, and 40). Due to the different independent base claim, the arguments are not identical. For example, in the particular case of these claims *as a whole*, the Examiner has not shown an understanding of the claims: for example, a security for corporate debt (e.g., a bond) is neither the same as, nor trivially different from, a corporate debt (e.g., a bank loan), as discussed above.

In the present situation, the Board can generally refer to the point at A(3)a regarding the failure of the Examiner to show the required input for this species and consider each claim *as a whole*, but this claim set is a different "whole" to be separately considered with respect to the unique set of requirements that are claimed. More so, as to this species, the inputs to the system have not been shown enabled or obviously available at the time of the invention. See A(3)a too.

A *prima facie* case of obviousness therefore has not been shown, and thus the rejection must be reversed.

5. As to claims 104-105

a. Incorporate by reference C1, and there is no reason to combine to reach the claimed real estate.

A main thrust of the Brief is not only that the Examiner's cited evidence is inadequate, but also that there is no proper reason to combine, as per the heading of this section in the Brief. On this point, as elsewhere, there is a complete failure by the Examiner to respond to a section of the Brief.

Indeed, at first, the Examiner submitted that Applicant's method ... having a system determined purchase price for property in consummating a sale in connection with a valuation of real estate is obvious in view of a "training module for midlevel bank people" (Coughlan) and a hypothetical portfolio for an interest rate index (Ginsberg), in view of the prior existence of real estate. However, neither Coughlan nor Ginsberg mention real estate or any method or means for performing a valuation of real estate nor any method ... having a system determined purchase price therefor. Adding Official Notice of the prior existence of real estate does not teach any valuation system for real estate.

Nor is it easy to imagine how Ginsberg's real time index and Coughlan's midlevel bank personnel training tool could handle a valuation of real estate as they seem to have nothing whatsoever to do with a valuation of real estate.

The Examiner appears to agree, and in the Answer adds Graff and a new argument. But as per the title of this section of the Brief, the issue is "no reason to combine." Adding another citation does not address the requirement for the Examiner to provide a proper reason to combine. *In re Lee; In re Rouffet, In re Kotzab. See also In re Fine and In re Clinton.*

This section of the Brief presents four separate reasons why there is no proper reason to combine at pages 136-138. The Examiner did not reply to any of these arguments: (1) no one would do a valuation of real estate with the Ginsberg technique because the Ginsberg factors have no correspondence in real estate; (2) Ginsberg's purpose of a "real time valuation index" has not been shown to be obviously feasible for real estate because real estate is not fungible and is not traded in "real time;" (3) Ginsberg's options and futures have not been

shown viable in the case of real estate because such options and futures seem unregistrable with the SEC or CFTC for financial exchange trading, in accordance with this purpose of Ginsberg; and (4) Ginsberg's methodology applies to an interest rate index and a hypothetical portfolio, neither of which have been shown workable with honest to goodness property, of any kind, including real estate. Further, the Examiner has not shown how Ginsberg's "real time barometer" objective could be carried out with real estate in 1992. Therefore, the Examiner has failed to provide a proper reason to combine or modify Ginsberg.

Instead of answering any of these points, the Examiner adds a new citation to the mix, and with no reason to combine, either. This is not responsive; the Examiner has failed to provide a proper reason to combine, and the rejection must be reversed on this ground.

With regard to adding a new citation to the rejection, in the Answer at page 68, lines 16-22, the Examiner acknowledges that real estate is not fungible (part of the second point), but contends that this doesn't establish a difference between the real estate and bond markets because not all bonds are identical. In reply, the Examiner's assertion is not sufficiently responsive to this (or any of the four points in the Brief, e.g., bonds are registrable with the SEC, but real estate is not, etc). The Examiner's point is insufficient to provide a reason to even try to modify Ginsberg to accommodate a valuation of real estate.

In the Answer, at page 68, lines 9-10, the Examiner states that:

Graff... teaches treating real estate as comprising a portfolio of debt instruments... making Ginsberg's methodology applicable to real estate...

To the contrary, Graff dealt with certain kinds of leases which have cash flows that can be treated for certain valuation purposes like debt instruments. Appellant truly has no idea what motivated the Examiner's statement, but it is clearly wrong. Real estate does not "comprise a portfolio of debt instruments," as anyone in finance would know, and Graff certainly did not teach this. Further, one having ordinary skill in finance would know that doing a valuation of real estate is significantly different and more complicated than doing a valuation of

bonds, and more so Ginsberg's hypothetical portfolio of generic securities. Further, one having ordinary skill in finance would know that these valuations respectively require different methodologies, and Graff does not make Ginsberg's methodology applicable to real estate.

In the Answer, at page 68, line 21 - page 69, line 3, the Examiner seems to argue that there is no fundamental difference between real estate and securities. This is wrong on its face. If one believes that there is no fundamental difference between real estate and Ginsberg's generic securities, one can attempt to take up residence on a bond or try to buy real estate futures on a financial exchange (as per Ginsberg's baskets). In reply to the Examiner's comments, the reason that Appellant repeatedly asserts that Ginsberg is directed to an index based on a hypothetical portfolio of generic securities and that an index is not honest to goodness property is because both are true; the latter being acknowledged by court decisions, S&P, Dow Jones, Wall Street, and seemingly everyone except for the Examiner. Furthermore, there is no teaching of the claimed invention *as a whole*, or any aspect of the claimed system determined purchase price for property in consummating a sale of real estate based on any or all of the cited art.

But returning to the point of this section, the Examiner has completely failed to provide a proper reason to combine the cited art for the reasons set out in the Brief, but skipped over by the Examiner's Answer. For this reason too, the rejection must be reversed.

6. As to claims 106-107

a. Incorporate by reference C1, and there is no disclosure of the claimed not including any securities.

The Examiner completely failed to respond to the major thrust of this section of the Brief, too, i.e., "no motivation for this modification...in the cited art." See Brief at page 140, continuing.

The Examiner skips most of the point of this section, including the Examiner's glaringly inconsistent statement quoted at page 139 of the Brief. The Examiner simply relies on

the above section of the Answer. The Board is directed to the above section of the Reply, too, but more so to this section of the Brief, which is uncontested by the Examiner. There is no proper motivation for the proposed modification of Ginsberg.

In particular, there is no teaching of a method ... having a system determined purchase price for ...property not including securities based on any of the cited art, i.e., a “training module for midlevel bank people,” and Ginsberg's hypothetical portfolio for an interest rate index, the prior existence of property not including any securities, and Graff. Additionally, the Examiner failed to provide a reason to combine, as set out in the Brief. Accordingly, the rejection must be reversed.

7. As to claims 110-111

a. Incorporate by reference C1, and Ginsberg's Treasury security is not tax-exempt.

As per section A(2)a above, it is respectfully submitted that the Examiner's claim construction is not reasonable because it is contradicted by the specification and extrinsic evidence that the Board can take note from many sources: one having ordinary skill in the art of finance knows exactly what is meant by a tax-exempt security, a term commonly used and understood in the art of finance as not including Treasuries. The Examiner is not entitled to make up and substitute his own definition for a term (i.e., tax-exempt security) that has a widely and clearly accepted meaning within the area of finance, and the Examiner is not entitled to ignore the correct definition on the untrue grounds that he wasn't aware of a widely accepted definition within the financial industry prior to Appellant's filing of the Appeal Brief. (A Definition was provided in the Amendment and Response). Further, there is a failure to consider each claim *as a whole*, including unavailability of system input before the 1992 priority date of this application. For these reasons, this rejection must also be reversed.

D. Incorporation by reference: A1, and further, Ginsberg, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to Claims 15, 17-28, 65, and 227

The Examiner reasserts that Ginsberg teaches the first and second valuations of property. The Examiner asserts at page 69 of the Answer that:

Appellant's assertion Ginsberg does not perform a market-based valuation of property failed on the ground that Ginsberg discloses exactly that (column 4, lines 30-67, column 5, lines 34-63).

In reply, the Board is directed to section A1 of the Brief and Reply, in particular the court decisions that have held that an index is not property.

The Examiner's Answer about Official Notice of "common computer hardware" is not responsive. The point of the Brief is that the Examiner's particular use of Official Notice in the Final Rejection cannot serve as a proper reason to modify Ginsberg to do the controlling. Also, "common computer hardware" is a new Official Notice contention, and Appellant has previously required references to support such Official Notice; *compare* this Official Notice with the rejections and Brief, pertaining to non-analogous art. (Official Notice in the Final Rejection is premised on non-analogous art, combined with no particular reason and insufficient explanation, in a way that makes no sense and would destroy and render Ginsberg inoperable for its intended purpose, intent, and function, and even so does not account for all the instant claim limitations). In response to a challenge to non-analogous art, the Examiner takes new Official Notice of "common computer hardware." However, this Official Notice is inadequate to suggest modifying Ginsberg to carry out the controlling. Hardware does not teach how it is controlled. Taking more Official Notice does not address this problem with the rejection. Furthermore, there is no indication of the particular art upon which this new Official Notice is premised, and a citation to support the Official Notice was required. In sum, though, this section of the Brief addressed the *reason to modify*, and more Official Notice is not responsive. See also, General Genus Does Not *Prima Facie* Establish Obviousness of Species or Subgenus.

a. Rejection is Premised on a Misconstrued Claim.

The Examiner does not respond to any contention in this section of the Brief, i.e.,

that the rejection is premised on a misconstruction of the claim. There is no teaching whatsoever of generating a market-based valuation for the property...reflecting...expected return under a performance scenario. Accordingly, the Examiner failed to consider all claim requirements in the claim *as a whole*, and for this reason, the rejection must be reversed.

b. There is no teaching of a performance scenario.

The Examiner conceded at page 11 of the Final Rejection that Ginsberg does not expressly disclose "performance scenario." On page 70 of the Answer, the Examiner changes theories to contend that although Epstein does not provide an explicit disclose, Epstein implicitly discloses "performance scenario" because Epstein mentions a "market scenario."

To the contrary, a market scenario is not a teaching of the claimed performance scenario. For example, an evening news broadcast sometimes reports that, "the stock market was up today in light trading." This is a market scenario. A market scenario does not disclose a performance scenario for say, IBM or General Motors stock. Thus, the Examiner's contention that "market scenario" implicitly discloses a valuation... reflecting...an expected return under a performance scenario is incorrect. Thus, the rejection must be reversed.

c. There is no reason to combine.

The Examiner does not respond to any of the five reasons set out in the Brief as to why the proposed combination or modification of art is improper. See Brief at pages 147-149. The rejection must be reversed for any and all of those five reasons.

2. As to claims 17 and 23

a. Incorporate by reference A1, and Ginsberg is not enabling.

The Examiner is correct that these claims do not pertain to "corporate debt," but instead pertain to generating a market-based valuation for the property... reflecting ...expected return under a performance scenario, as discussed above. Appellant apologizes for the confusion from this obvious word processing mistake.

However, the general concept of this section still remains, i.e., lack of

enablement, insufficient disclosure, and improper reason to combine. The Examiner conceded at page 11 of the Final Rejection that Ginsberg does not expressly disclose "performance scenario." As per the above sections of the Brief, D(1)a-c of the corresponding sections of the Reply, Epstein's "market scenario" does not disclose an expected return under a performance scenario. Accordingly, in the context of these claims, too, there has been an insufficient showing of *prima facie* obviousness. Thus, the rejection must be reversed.

3. As to claim 65:

- a. Incorporate by reference D1, and further there is no disclosure of system-determined purchase price for the property.**

The Examiner's answer is not responsive to any of the three points raised in this section of the Brief. The first point is that the system-determined purchase price and the valuation must be directed to the same property, which is not shown in Ginsberg. The second point is that Ginsberg's valuation is of the hypothetical portfolio of general securities, which is not property and is not subject to a sale. The third is that Ginsberg simply does not disclose a system-determined purchase price of the property. For any (and all) of these uncontested reasons, the rejection must be reversed.

Rather than dispute any of these three points in the Answer, at page 70, line 21- page 71, especially line 9, the Examiner instead refers to "...consummating the property...." Appellant assumes the Examiner intends, "...consummating a sale of the property...." The Examiner asserts incorrectly that::

...Ginsberg discloses the delivery of actual securities to be delivered pursuant to the futures contract, where actual securities to be delivered are chosen by scanning the market, and these actual securities may be among the property for which the market was already scanned in performing Ginsberg's market-based valuation for property. Therefore, Ginsberg's system-determined purchase price for property can be for the same property for which the market-based valuation was generated.

This is not true. First, if a person reads the previous day's closing stock price for IBM in the financial section of a daily newspaper, the person is "scanning the market" for a

recent transaction price of IBM stock. But this is not the same as generating a system-determined purchase price in consummating a sale, especially for a forthcoming transaction; the person is only a reading about a previous price. Thus, the Examiner's contention is incorrect that "scanning the market" for a recent transaction price is the same as generating a system-determined purchase price in consummating a sale, especially in view of the other claim requirements *as a whole*.

Second, the Examiner continues to switch theories as to the property and valuation, here using the Actual Securities Theory (see Reply, section A(1)(a)(1) for the property and using the Market Data Theory (see Reply Section A(4)a) for the valuation. While these theories have been separately discussed above, there is further error in this combination of theories.

The claim *as a whole* requires that (parent claim 64):

...generating, with the second...computer and the input, the financial analysis output having the system-determined purchase price for the property in consummating the same...

and (claim 65)

...wherein the controlling is carried out under a performance scenario as part of the output.

Under the Examiner's theories, the market data would have to be subject to Epstein's "market scenario" as the performance scenario (which has not been shown, as discussed above), that somehow is used downstream in consummating a sale of the actual securities corresponding to the options and futures contracts with a system determined purchase price, which is also not shown.

Indeed, the Examiner is incorrect in even suggesting that these "actual securities" are chosen by the Ginsberg system for delivery by Ginsberg system users: the Ginsberg invention does not due to any determining of a purchase price. As to securities for the options/futures contracts, Ginsberg does identify "actual securities" for potential delivery by the

option and futures traders. However, identifying securities is not a teaching of a system-determined purchase price, and moreover the traders can close out trading positions however they might choose. For example, they can do so by selling the contracts before maturity rather than delivering the identified "actual securities" to satisfy the requirements of the contracts, should they so choose. Alternatively, traders can close out a position in a particular contract by purchasing the same number of opposite positions in the same contract (i.e., by purchasing short positions if they already hold corresponding long positions, or by purchasing long positions if they already hold corresponding short positions) and delivering the long and short contracts together to the exchange. As another alternative, in a volatile market environment with rapidly fluctuating prices, the traders may choose to deliver "actual securities" to close out the trading positions, but they may select other "actual securities" allowed by the contracts than the securities identified by the Ginsberg system. In sum, the Ginsberg system merely makes a passive identification of "actual securities" for possible delivery by traders who use the Ginsberg system output; no occurrence of any transaction is implied by the recommendation.

Finally, even if a trader chooses to deliver the "actual securities" recommended by the Ginsberg system to close out a trading position in an option (respectively, futures) contract, the transaction price is not the price scanned by the Ginsberg system, nor is the transaction price determined by the Ginsberg system. The transaction price for the "actual securities" in closing out the position will be the price specified in the option (respectively, futures) contract. For all of the above reasons, the "actual securities" prices "scanned" by the Ginsberg system do not disclose the system-determined purchase price for property in consummating a sale of the instant claim *as a whole*. Therefore, the rejection must be reversed.

E. Incorporation by reference: A1, and further, Ginsberg, Graff, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to Claims 2, 30, 118-177

At page 71, line 20-page 72, especially beginning at line 12, the Examiner

attempts to blur a distinction between creating an option contract and creating an options market for real-time trading of options contracts. The Examiner attempts this blur regarding futures contracts/market, too. In order to enable options (respectively, futures) contracts to be traded in real time (as per an object of Ginsberg) in a public options (respectively, futures) market, it is necessary for the *contracts* to be standardized, and it is separately necessary for the *products* to be standardized so that they can be delivered to close out options (respectively, futures) trading positions. In other words, it is necessary *both* for the contracts to be fungible and also for the products to be fungible that can be delivered to close out trading positions.

Option and futures markets exist that trade contracts in (fungible) commodities, e.g., sugar, wheat, potatoes. However, no option or futures market has ever traded contracts in, for example, Van Gogh's Sunflower paintings. Even though several Van Gogh Sunflower paintings exist, the paintings are neither functionally nor aesthetically interchangeable nor considered by art experts to be of equal value, i.e., they are not fungible.

It is conceivable that an owner of a Van Gogh Sunflower would create an option contract on a painting, but such a contract would not be tradable in the real time objective of Ginsberg for many reasons. For example, a prospective purchaser of the contract would have to verify the condition of the painting, the legal status of title to the painting, the status of insurance on the painting, the legal status of constraints to prevent the painting's current owner from selling the painting during the life of the option contract, etc. In other words, a Sunflower painting option contract would clearly not be tradable in real time in the public markets (and would not be registerable with the SEC (CFTC) either). Accordingly, contracts on Sunflower paintings would not be tradable in real time even if far more Sunflower paintings were available to support a market for the contracts.

The cited time-consuming and expensive verifications that make a real time market in options (respectively, futures) contracts on Sunflower paintings impossible can be avoided in the case of options (respectively, futures) contracts on fungible commodities. That is

why options (respectively, futures) exchanges can exist for real time trading of options (respectively, futures) contracts for sugar, wheat, and potatoes, but not for Sunflower paintings or other items that are not fungible.

The Sunflower contract example illustrates the difference between creating an options (respectively, futures) contract and an option (respectively, futures) contract that is tradable in real time. The Ginsberg Abstract clearly discloses that the Ginsberg invention supports options (respectively, futures) markets for contracts that are tradable in real time. Indeed, the value created by the Ginsberg invention is the generation of real time financial data to support this trading. Timely data is irrelevant in the case of contracts that cannot be traded in real time. Thus, the Ginsberg invention is unrelated to options (respectively, futures) contracts that are not fungible.

The Examiner contends incorrectly that he has a way to circumvent the fungibility problem to facilitate options and futures markets for real estate. On page 68, lines 16-18 (and again on page 72, lines 7-9) the Examiner contends that fungibility is unnecessary since "the money that can be obtained by leasing or selling real estate is fungible." But the claim requires real estate, not money; and money will not close out a futures or options contract on real estate because real estate. Appellant also notes that the Examiner's above-discussed contention concerning fungibility would imply, if it were correct, that fungibility is an irrelevant consideration in creating options (respectively, futures) markets for the real time trading of options (respectively, futures) contracts. Clearly this is not correct.

If the Examiner's contention were correct, then the Examiner's solution would be enabling in the case of other types of tangible property too, for example, in the case of the Van Gogh Sunflower paintings cited above. Because, as has already been explained, Ginsberg does not enable an options (respectively, futures) market in Van Gogh Sunflowers paintings or any other non-fungible goods, Appellant asserts that the Examiner's Answer concerning the applicability of the Ginsberg invention prior to the instant claims' 1992 priority date to real estate

is incorrect.

In the Answer at page 71, line 22-page 72, especially beginning at line 12, the Examiner alleges that the existence of securitized mortgage pools is enabling of real time tradable options (respectively, futures) contracts in mortgages and leases. But mortgages and leases are not the same as the claimed real estate. Further, Appellant acknowledges that some types of mortgages (e.g., residential mortgages) can be pooled and the resulting pools securitized in large part because the mortgage contracts are highly standardized. However, even in the case of (standardized) residential mortgages, careful assemblage and diversification of large pools is required in order for the shares to be marketable. Even so, shares in one pool are not similar enough to shares in another pool for the two types of shares to be accepted as interchangeable by the market, or at least the Examiner has not shown so in the prior art. For this reason, options and futures markets do not trade contracts on shares in the pooled mortgages, and certainly did not back in 1992, the priority date of this patent application.

In the case of commercial leases, the commercial real estate market has apparently resisted or defied all attempts at lease standardization, in large part because the specific, idiosyncratic needs of lessees take precedence over trading possibilities. Thus, options contracts on leases would not be fungible, and certainly the Examiner has not shown anything to the contrary that predates Appellant's 1992 priority date. Accordingly, such contracts have not been shown in the prior art marketplace, and the Examiner has not met the burden of showing *prima facie* obviousness.

In the Answer at page 72, after line 4, and more particularly in lines 10-12, the Examiner attempts answer to the question, "What is an option on a lease?" However, the Examiner's attempt is woefully incomplete, omitting consideration of the absence of fungibility from the commercial lease market, so as to be acceptable to the options exchanges for real time trading, in accordance with this object of Ginsberg. Furthermore, the situation must be examined from the art prior to Appellant's 1992 priority date. The Examiner's proposed

hypothetical product that has not been shown viable is insufficient evidence to suggest or prove statutory obviousness.

The Examiner's solution to the lease option problem is only one example of how the Examiner plays fast and loose with the phrase, "what would be obvious to an individual with ordinary skill in the art of finance." Another example is the Examiner's dismissal of fungibility as a product attribute in the creation of markets for the real time trading of option (respectively, futures) contracts in the products. Appellant responds that practitioners with "ordinary skill in the art of finance" apply their skills more to discerning practical limitations on the applicability of existing tools of financial technology - thus conserving time and money - than to making uninformed assertions about extending the tools by superficial analogy.

Another example is found in the Answer at page 72, lines 5-7, where the Examiner contends that:

...Appellant comes *close to declaring his own ideas* (as disclosed more than a year before the patent application's filing date)...

Appellant has no idea what the Examiner seems to think here, but the article does not disclose or suggest the invention, not the least because it is dealing with commercial leases, not temporally decomposed property. The article is simply earlier work in the same field of finance. Appellant interprets the Examiner's statement that, "...Appellant comes *close to declaring his own ideas*" as meaning that Appellant comes close to disclosing the claimed subject matter in some intuitive sense tellingly left undefined by the Examiner, and if this is what the Examiner intends, then as a matter of fact, he is wrong. Furthermore, coming close to having evidence of statutory obviousness is not what the statute requires. Therefore, the rejection must be reversed.

a. No reason to combine or modify.

The Examiner contends that the points of this section are "attacking the individual references in a vacuum..." at page 72 of the Answer.

In response, Appellant has not made such an argument, and to the contrary, the Examiner has failed to meet the requirement providing of a proper reason to combine for the reasons set out in the Brief, more particularly as follows:

(1) There is No Plausible Reason to Combine.

The Examiner completely failed to answer this point in the Brief, and the Board is directed to pages 152-156 of the Brief, which stand unopposed and uncontradicted by the Examiner. As per any and all five of the points set forth on this point in the Brief, the Examiner has failed to set out a proper reason to combine.

Ginsberg is directed to an index, and courts have uniformly held that an index is not property. Appellant pointed out that if Ginsberg were modified to handle honest to goodness bonds instead of an index, it would defeat the “real time barometer” object (i.e., changing / expiring bonds would mean a changing / expiring index) of Ginsberg. The Examiner did not answer this observation at pages 83-84 of the Brief. The law prohibits a rejection based on such a modification, as per MPEP Section 2143. Appellant is not “attacking the individual references in a vacuum, as the Examiner contends in the Answer at page 72. Appellant is requiring the Examiner’s compliance with MPEP Section 2143 and case law prohibiting rejection based on a combination or modification that would destroy the intended function of cited art. *In re Gordon*, (CA FC) 221 USPQ 1125 (May 10, 1984).

(2) Examiner’s Reason to Combine is Insufficient.

The Board is directed to this point at pages 156-156, which also stands unopposed and uncontradicted by the Examiner. As per this section of the Brief and *In re Fine*, the Examiner failed to set out a sufficient reason to combine. Thus, the rejection must be reversed.

(3) Examiner’s Proposed Modifications Are Inoperable and Not Enabled—Something Undoable is Not Obvious.

With regard to the point at pages 157-158 of the Brief, the Examiner again

completely failed to respond. Appellant's point stands unopposed and uncontradicted by the Examiner. As per the Brief, something undoable is not obvious, and Examiner failed to set out a plausibly operable or enabled theory to justify the combination. There is no reasonable expectation of success in making the Examiner's proposed modification or combination, and thus the rejection must be reversed. See *In re Clinton*.

(4) The Examiner Concedes that the Ginsberg Methodology is Inapplicable to Graff or the Claims.

The Examiner's explanation of allowable subject matter (discussed in this section of the Brief) essentially concedes that Ginsberg and Graff cannot be made to fit together. However, at page 73 of the Answer, the Examiner urges that "there is more than a mere potential for applying Ginsberg's methodology to real estate leases...*there is the motivation and teaching of Graff.*"

What motivation and teaching of Graff? (Tellingly, the Examiner's italicized portion of the above quote has no antecedent for "the.") Regardless of Graff, one cannot apply the methodology of Ginsberg, a real time index, to real estate because there is no real time data on real estate, real estate futures/options contracts are not viable for real time exchange trading, etc. Furthermore, Ginsberg is valuing an index, and courts have held that an index is not property. The Examiner has failed to show that Ginsberg could be modified to handle any honest to goodness property by failing to respond to this point in the Brief at pages 83-84 (i.e., changing / expiring bonds would mean a changing / expiring index). See too MPEP Section 2144. The Examiner shows suspicious umbrage about the Graff article, but apparently does not appreciate its lack of significance to the claimed invention. The Examiner's attempt to modify Ginsberg's index system to real estate for exchange traded options and futures contracts prior to the instant claims' priority date in 1992 is just pie in the sky.

As set out in sections E(1)a(1)-(4) of the Reply (with many sub-parts) and this portion of the Brief, the Examiner has failed to provide proper motivation for the combination or

any plausible theory of *prima facie* obviousness. Thus, the rejection must be reversed.

b. All claim limitations were not considered; many claim elements are not disclosed in the combination.

The Examiner also completely failed to respond to this point, which also stands unopposed and uncontradicted. The Board is directed to the Brief at page 160. There is neither a disclosure of all claimed elements, nor of any claim *as a whole*. No *prima facie* obviousness, and thus pursuant to *In re Fine*, the rejection must be reversed.

(1) No cited art teaches generating a second...valuation for the property...with the second...computer.

This point too was skipped over by the Examiner. As per the Brief at page 160, there is neither disclosure of all claimed elements, nor of any claim *as a whole*. With no *prima facie* obviousness, the rejection must be reversed pursuant to *In re Fine*.

(2) No cited art teaches a market-based valuation... as part of the financial analysis output...as input to the second...computer such that the one could do the step of generating the second market-based valuation for the property using... the input.

The Examiner did not answer this point too, which stands unopposed and uncontradicted. As per the Brief at pages 160-161, there is neither disclosure of all claimed elements, nor of any claim *as a whole*. As above, no *prima facie* obviousness has been shown, and thus pursuant to *In re Fine*, the rejection must be reversed.

(3) No cited art teaches generating a second financial analysis output, including the second market-based valuation.

The Examiner also skipped over this point, and the Board is directed to the Brief at page 161, there is neither disclosure of all claimed elements, nor of any claim *as a whole*. With no *prima facie* showing of obviousness, thus, the rejection must be reversed pursuant to *In re Fine*.

c. Official Notice / Insufficient Reason to Combine or Modify.

The Examiner also completely failed to respond to this central issue in the Brief. As per the Brief at pages 161-164, there is no proper reason to modify, and Examiner failed to respond to any of the separately listed reasons why the proposed modification is improper for failing to provide a suitable reason to modify. Thus, the rejection must be reversed pursuant to *In re Lee*, *In re Rouffet*, *In re Kotzab*, *In re Gordon*, *US vs. Adams*, *In re Rettedges*, and *In re Fine*.

2. As to claims 118-127 and 138-147:

a. No teaching of a component of temporally decomposed property.

At page 74 of the Answer, lines 2-16, the Examiner confuses the claim requirement of decomposing property with decomposing benefits from the property. Thus, the Examiner's contention is beside the point: no teaching of the claim requirements.

The Examiner disagrees with the point in this section of the Brief that distinguishes temporal decomposition of property ownership from carving out leases from leased property. However, a lease is not a decomposition of property as there is no ownership change in the property occasioned by a lease.

More precisely, in the Brief, Appellant noted the existence of Federal tax statutes, Treasury regulations, Internal Revenue Service regulations, and federal Appellate Court case law, all directed at specifying federal tax treatment unambiguously in the case of temporal decomposition of property ownership and explicitly limited in scope to temporal decomposition of property ownership in contrast to general decomposition of economic interests in the property. To illustrate the contrast, Appellant also cited federal cases showing that the taxation of lease carve-outs is ambiguous. It follows that, contrary to the Examiner's theory, a lease is not a teaching of temporal decomposition of property.

The Answer on page 74, lines 6-8, states that, "Examiner takes the conflict as indicating that there is no clear distinction between the temporal decomposition of property and

the temporal decomposition of economic benefits,..." The Examiner explains this novel legal interpretation by asserting that the failure of the temporal ownership decomposition tax treatment to extend to leasehold carve-outs is an inadvertent IRS/Congressional/Judicial oversight, stating in lines 9-12 that, "...the tax code does not necessarily provide unambiguous answers to questions arising from complicated financial dealings, especially of a type not invented when the tax code was written."

The Examiner's highly novel view that the tax law precedes these financial dealings reveals that the Examiner is willing to trouble Appellant and the Board by asserting legal positions without doing the required legal research. It is respectfully submitted that the Examiner's novel view is frivolous because highly visible carved out leasehold interests have been around as major economic assets long before the cited tax statutes, regulations, and federal appellate decisions. Accordingly, the Examiner's characterization of the limited scope on the unambiguous tax treatment accorded to temporal ownership decomposition by the U.S. Congress, the U.S. Treasury, the Internal Revenue Service, and the Federal Courts as an inadvertent oversight that arose due to subsequent advances in the area of finance is completely and totally incorrect.

The Board can take Official Notice, if it wishes, of any number of instances showing the Examiner's error. As an example of a highly visible carve-out, the Empire State Building situation was widely reported. Prudential Insurance purchased the Empire State Building in the early 1950s and immediately signed a 99-year ground lease with the late Harry Helmsley. By the 1970s, Helmsley's lease was much more valuable than Prudential's leased fee interest. In fact, the Helmsley ground lease is still considered to be one of the cornerstone assets of Leona Helmsley's real estate empire. All this and many other illustrations shows that the Examiner is in error, though the greater point is that the Examiner has failed to prove the *prima facie* obviousness. There is no teaching of this claim element whatsoever and none of the claim *as a whole*. The rejection must be reversed on this ground too.

b. No teaching of the claimed system-determined purchase price for a component of temporally decomposed property.

In reply to the Examiner's argument, the Board is directed to Section D(3)a above, but the context of this claim *as a whole* is different in view of Ginsberg's "real time barometer" and other purposes, etc. in the context of the claimed temporarily decomposed property, as per Section E(2)a above. Neither claim element has been shown either in the cited art nor the combination in the context of the claim *as a whole*. Therefore, the Examiner has not made out a *prima facie* case of obviousness, and the rejection must be reversed.

c. No reason to combine.

Again, this claim *as a whole* differs from others in the combination of the two elements that have not been shown in the cited art, as discussed in Section E(2)b above, and more so in view of the other errors made in evaluating the base claim, e.g., Ginsberg is directed to an index, and courts do not view indexes as property, failure to consider the claim *as a whole*, no proper reason to modify, etc. The Examiner failed to make out a case of *prima facie* obviousness. Thus, the rejection must be reversed.

d. As to claims 119, 124, 139, and 144 there also is no teaching of the claimed remainder interest.

In the Answer at page 75, lines 3-14, the Examiner disagrees with the definition of "remainder" as presented in Gifis, Law Dictionary. The Examiner contends in lines 9-12 that, "Merriam-Webster's Collegiate Dictionary (tenth edition, 1997), gives a shortened version of the legal definition of "remainder," but also gives as the second meaning, "a remaining group, part, or trace," which is broader and (the Examiner contends) covers a residual interest as a remaining part. Moreover, Examiner notes once again that it is proper, in rejecting a claim, to give the claim language the broadest reasonable interpretation."

Appellant again responds that "reasonable" is the key qualifier, and that individuals having ordinary skill in the art of (real estate) finance would attribute the legal definition to "remainder" when encountering the noun in a document on real estate finance.

Indeed, it would be absurd for an individual skilled in real estate finance to attribute another meaning to "remainder" when the subject of the discourse is temporal decomposition of property ownership, for example, in Appellant's Specification and claims. Accordingly, the Examiner is obligated to do likewise, and has therefore failed to correctly construe the claim. See MPEP Section 2111.01.

The Examiner protests that Appellant did not provide a definition of "residual," but denies a patent due to a baseless misconstruing of the claim. Because the Patent and Trademark Office has the burden of proof for withholding a patent, and the Examiner has failed to provide a definition to support his claim construction, the rejection must be reversed on this ground too.

e. As to claims 120, 125, 140, and 145 there also is no teaching of the claimed equity interest in a remainder interest.

At page 75, line 17-page 76, line 8, the Examiner concedes there is no teaching of the claimed equity interest in a remainder interest. Therefore, a *prima facie* showing of statutory obviousness has not been made out.

Skipping over the absence of a teaching of this claim element, the Examiner asserts that a fractional interest is an example of an equity interest and that the valuation of a fractional interest is straightforward. However, the Examiner's contention is not shown as prior art evidence. Moreover, the Examiner's speculations wrongly assume that this is the case of a liquid asset, and the Examiner acknowledges in lines 5-7 that his valuation methodology may not apply in the case of illiquid assets. This inconsistent speculation is hopelessly inadequate as prior art evident of *prima facie* obviousness.

In reply, the Specification (page 29, lines 10-13) teaches, and the Brief explains, that remainder interests are illiquid assets. Indeed, part of the value created by Appellant's invention is showing how to securitize remainder interests in order to make them more liquid. Accordingly, the Examiner's assertions are inadequate prior art evidence and inapplicable to the

subject of the claims. Thus, the rejection must be reversed.

f. As to claims 121, 126, 141, and 146, there also is no teaching of the claimed estate for years interest.

At page 76 of the Answer, the Examiner notes that the rejection "depends on the argument that Graff does not teach a component of temporally decomposed property." As stated above, decomposing "economic benefits from property" is not a teaching of the claimed decomposing property. See Reply, Section E(2)a above. The Examiner's other comments are not responsive to the Brief at page 172-173, to which the Board is directed. The contention that Appellant does not supply a definition of "estate for years," and thus has no basis for distinguishing the art, confuses the statutory burden of proof. The Examiner is required to show that the prior art teaches the claimed invention. Further, Appellant again notes that the Examiner's claim construction is required to be "reasonable," and the Board can take Official Notice that the term "estate for years" is well defined in real estate law. Appellant has no duty to provide a definition of such basic real estate terminology, and a patent cannot be withheld on this ground. In any case, the Examiner concedes there is no teaching of equity interest in a remainder interest. Thus, the rejection must be reversed.

g. As to claim 122, 127, 142, and 147 there also is no teaching of the claimed term of years interest.

The Examiner's comments in the Answer at page 75-76 that the rejection "depends on the assumption that Graff does not teach a component of temporally decomposed property." As stated above, decomposing "economic benefits from property" is not a teaching of decomposing property. See Reply, Section E(2)a above. The Examiner's other comments are not responsive to the Brief at pages 171-172. The Examiner contends in lines 3-4 that "...the Graff article teaches treating the interest in receiving a stream of lease payments as a *quasi-term of years interest*" (emphasis added).

In reply, Appellant respectfully has no idea what the Examiner is asserting because the term "quasi-term of years interest" is not defined in the legal literature or the

common vernacular and it seems that the Examiner is just making up things to try to obscure fallacious reasoning.

The Examiner has failed to make out a case of *prima facie* obviousness.

Therefore, the rejection must be reversed.

3. As to claims 123-127 and 143-147

a. No teaching of the claimed fractional interest.

In the Answer at page 77, lines 11-15, the Examiner adds nothing new, and thus fails to consider the invention *as a whole*. The Examiner contends that a prior argument addresses the claimed fractional interest in a component temporally decomposed from property, but there is no such prior Examiner Answer. In any case, this is way beyond the teaching of Ginsberg's "real time value index," regardless of all the other cited art and art in support of the Official Notice.

The Examiner failed to make out a *prima facie* case of statutory obviousness.

Thus, the rejection must be reversed.

F. Incorporation by reference: D1, E1, and F1, and further, Ginsberg, Graff, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 128-137

a. No reason whatsoever to combine or modify.

Although the Examiner answers at page 77, line 1 continuing, that this section repeats arguments presented and rebutted, in fact this rejection includes another art reference and different claims. With regard to the failure of the Examiner to provide a reason to combine/modify, the Examiner completely skipped over this point, which stands unopposed and uncontradicted. See Brief at pages 175-190. The Examiner's previously presented arguments do not consider the present claims respectively *as a whole*. As per the Brief, the Examiner did not provide any reason whatsoever to combine or modify, and this rejection is defective as a matter of law and must be reversed. See *In Re Lee*, *In re Rouffet*, and *In re Kotzab*.

2. As to claims 16, 128-137

a. No reason to combine or modify.

The Examiner asserts that prior arguments are applicable here, though they have not been shown so. These claims are distinct and must be considered each *as a whole*. As discussed in the Brief at pages 175-177, the addition of another citation of art causes additional conflicts and contradictions by the teaching in the cited art that the Examiner has not previously addressed. The Board is directed to this section of the Brief on this and other points concerning each claim respectively *as a whole*.

In the Answer at page 77, line 16 - page 78, line 11, the Examiner skips over his burden to provide a proper reason to combine. Further, at lines 3-4, the Examiner states that, "... and Graff teaches a portfolio of debt instrument which will not be owned indefinitely." This is not correct. Graff teaches a portfolio of leases, and U.S. courts have held over and over again that a lease is not a debt.

At page 78, lines 8-9, the Examiner states that, "...it does not follow that one would not use Epstein's teachings to help value a stream of payments derived from a lease." The Examiner confuses a double negative with a positive. Further, the Examiner is required to provide a proper reason to combine.

In particular, it is not sufficient for the Examiner to conclude that there is no reason for an individual not to use Epstein "to help" with a valuation methodology; the Examiner has the burden of showing the existence of some reason why one would use Epstein "to help" (whatever that means) with a valuation methodology of Ginsberg. However, Epstein doesn't even discuss lease valuation methodologies. Thus, the position taken in the Brief has not been overcome.

The Examiner continues at page 78, lines 10-11, with the contention that, "...changes in interest rates would affect the value of such a stream of lease payments in much the same way that they would affect the value of bonds, so Epstein's teachings are very much

applicable." Appellant responds that "in much the same way" is an acknowledgment by the Examiner that this analogy is not clear-cut. The Examiner's imprecise analogy is too vague to provide support for withholding a patent under the standards of 35 USC Sec. 103. Moreover, the statutory question is not whether "Epstein's teaching are very much applicable," but whether the Examiner has provided a proper reason to combine/modify, as pursuant to this uncontested portion of the brief. Thus, the rejection must be reversed.

b. Failure to consider the claim as a whole.

The Examiner completely failed to respond to the point, and the Board is directed to page 177 of the Brief. For the reasons set out there too, the rejection must be reversed.

c. As to claim 16, incorporate by reference E1 and further there is no disclosure of the claimed market-based valuation reflecting an expected return under a performance scenario.

This point stands at page 177 of the Brief unopposed and uncontradicted by the Examiner. The Board is directed to page 177 of the Brief. The Examiner failed to show this claimed element, and moreover failed to make a showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show that Ginsberg is modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price for the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

d. Incorporate by reference D, and further as to claim 128, there

is no teaching of the claimed component temporally decomposed from property.

This point at page 177 of the Brief is unopposed and uncontradicted by the Examiner. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show that Ginsberg is modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

i. As to claim 129, there also is no teaching of the claimed remainder interest.

This Examiner did not address pages 182-183 of the Brief. As per the Brief, the Examiner failed to show this claimed element, and moreover in connection with the claim *as a whole*. In response to the comments the Examiner did make, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure

to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

ii. As to claim 130, there also is no teaching of the claimed equity interest in a remainder interest.

This point stands unanswered by the Examiner at pages 183-184 of the Brief. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, pursuant to *In re Fine*, the rejection must be reversed.

iii. As to claim 131, there also is no teaching of the claimed estate for years interest.

This point stands at pages 184-185 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e.,

changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

iv. As to claim 132, there also is no teaching of the claimed term of years interest.

This point at pages 185-186 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Therefore, the rejection must be reversed pursuant to *In re Fine*.

e. Incorporate by reference F1b, and further as to claim 133-137, there is no teaching of the claimed fractional interest.

This point stands at pages 186-187 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-

analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Pursuant to *In re Fine*, the rejection must be reversed.

i. As to claim 134, there also is no teaching of the claimed remainder interest.

This point stands at pages 187-188 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be overturned pursuant to *In re Fine*.

ii. As to claim 135, there also is no teaching of the claimed equity interest in a remainder interest.

This point stands at pages 188-189 of the Brief unanswered by the Examiner. As

per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Pursuant to *In re Fine*, the rejection must be reversed.

iii. As to claim 136, there also is no teaching of the claimed estate for years interest.

This point stands at pages 189-190 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness.

Thus, the rejection must be reversed pursuant to *In re Fine*.

iv. As to claim 137, there also is no teaching of the claimed term of years interest.

This point stands at pages 190-191 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with the claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider the claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Accordingly, the rejection must be reversed pursuant to *In re Fine*.

G. Incorporation by reference: C1, D1 and E1, and further, Ginsberg, Coughlan, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 68-75, 80-95, 112-115, and 230-257

a. No reason to combine or modify.

This point at pages 191-192 in the Brief receives the Examiner's comments at page 78-79 of the Answer, but the comments are not responsive because adding a new citation to art cited to different claims is indeed a new issue. Adding Coughlan to the mix does indeed cause other conflict in the combination uniquely cited here, as set out in this section of the Brief, and further there are different claim elements at issue "*as a whole*." The Examiner's assertion that there is not conflict is not responsive to pages 191-192. With no showing of a proper

reason to combine/modify (i.e., no motivation for the entire combination, the combination/modification would defeat the "real time barometer" object of Ginsberg, etc.) the rejection must be reversed.

b. As to claims 68-71 and 230-233 there is no enabling disclosure for at least one security for corporate debt.

In the Answer at page 79, lines 6-7, the Examiner contends once again that, "Appellant argues that Ginsberg does not disclose taking a non-zero risk into account; Examiner replies that Coughlan teaches this...". In response, Appellant asserts that the Examiner refuses to acknowledge the distinction between output and the claimed input. See Reply Section C(1)a above.

As discussed in this section of the Brief and section C(1)a of this Reply, Coughlan only teaches risk quantification as system output, whereas Appellant's claims require using a quantified risk measurement as merely one of several system inputs. Other problems with Coughlan are also discussed at C(1)a. Thus, the Examiner's contention that, "Coughlan teaches this... (i.e., taking a non-zero risk into account)," is incorrect. Thus, the rejection must be reversed.

c. As to claims 72-75 and 234-237 there is no enabling disclosure for corporate debt.

In the Answer at page 79, lines 14-22, the Examiner asserts that Appellant's citation of a bank loan as an example of unsecuritized corporate debt is irrelevant. Appellant responds that Ginsberg is not modifiable to do a "real time barometer" index for valuations of corporate debt as shown above at pages 45-47. Accordingly, Appellant maintains that the Examiner has not shown that Ginsberg provides an enabling disclosure of the claimed invention. See Reply at Section A(3)a. Thus, the rejection must be reversed.

d. As to claims 80-83 and 242-245 there is no enabling disclosure for real estate.

The bulk of addressing the Examiner's comments here have been set out at

Section 2(5)a of the Reply. The Examiner does not add anything here to the Final Rejection arguments, which Appellant's Appeal Brief has already rebutted. Ginsberg is not modifiable to do a "real time barometer" index of real estate due at least in part to the fact that real time input is not available for generation of a "real time barometer" of the real estate market, or at least the Examiner has not shown that it was available prior to Appellant's priority date of 1992.

The Examiner again confuses Graff: decomposing property is different than decomposing economic benefits or lease rights, as discussed in Sections C(5)a and E(1) of this Reply. The Examiner does highlight once again the incorrect contention that, "Appellant makes arguments which have been made and rebutted with regard to previous claims, e.g., the argument that real estate is not fungible, to which the rebuttal is that the money obtained from leasing real estate is fungible." The Examiner's statement acknowledges that real estate is not fungible. Furthermore, the Examiner does not present clarification of how the fungibility of money received from leasing a real estate asset compensates for the absence of fungibility in the case of real estate itself as claimed. The Examiner implies that his contention applies to all nonfungible assets. However, Appellant has already shown in the above examples of option and futures contracts on Van Gogh Sunflower paintings that asset fungibility is an indispensable requirement in many financial applications, including the Examiner's cited art. Accordingly, the Examiner's contention does not overcome the issue raised in this section of the Brief. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner has failed to show that Ginsberg is modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to

consider each claim *as a whole*. In sum, a *prima facie* case of obviousness has not been made out, and the rejection must be reversed.

- e. **As to claims 84-87 and 246-250, the Examiner concedes that there is no teaching for property not including any securities.**

This point stands at pages 200-204 of the Brief unanswered by the Examiner. Ginsberg has not been shown to be modifiable into a "real time barometer" with valuations of property not including any securities. As per the Brief, the Examiner has failed to show this claimed element (see Section C(6)a of this Reply), and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

- f. **As to claims 92-95 and 255-257, there is no teaching of tax-exempt.**

(1) **Ginsberg's Treasury security is not tax-exempt.**

This point stands at pages 204-205 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element (see Section A(2)a etc. in this Reply), and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

(2) **Ginsberg does not enable municipal bonds as the tax-exempt.**

This point stands at pages 205-206 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element (see Section A(2)b in this Reply), and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Accordingly, pursuant to *In re Fine*, the rejection must be reversed.

(3) **Summary.**

This point stands at pages 204-206 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. In response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price for the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

H. Incorporation by reference: A1, C1, and E1, and further, Ginsberg, Graff, Coughlan, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 44, 148, 152-177

At page 81, line 2, the Examiner is correct that there is an error regarding claim numbers. The cited claims should have been 44 and 148-177, as plainly apparent from the points raised in the Argument and acknowledged in the Answer at page 81. Appellant apologizes for the typographical error. At page 81, lines 4-6, the Examiner states: "Examiner once again disputes Appellant's assertion that Ginsberg's system does not handle any property... ." Again, Ginsberg is an index: it is a valuation of a mathematical construct. Courts have held that indexes are not protectable as property. Further, the Examiner never answered pages 83-84 of the Brief that Ginsberg cannot be modified to handle honest to goodness property (i.e., changing/expiring bonds would mean a changing/expiring index). See Reply at Section 1 above. A *prima facie* case of obviousness has not been made out. Thus, the rejection

must be reversed.

a. No reason to combine or modify.

The Examiner contends in the Answer at page 81, line 9, that a proper reason to combine/modify is set out at pages 73-74. However, no proper reason is set out there. Appellant disputed the reason to combine some of the cited art at Section E(1)a above, which incorporates further points of Section A(1)2, neither of which have been overcome by the Examiner (compare Brief, Answer and Reply sections). As to the points raised by the Examiner at pages 73-74, see the Reply at Section E(2). As to the Examiner's assertions regarding Coughlan, see Reply at Section C which incorporates section A1. Further, in response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price on the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider each claim *as a whole*. Therefore, the rejection must be reversed.

(1) There is No Plausible Reason to Combine.

This point stands at pages 208-212 of the Brief unanswered by the Examiner because the Examiner failed to show a proper reason to combine all this cited art and Official Notice with each claim *as a whole*. Ginsberg has not been shown modifiable into a "real time barometer" index for doing a valuation of property reflecting a quantitative description of risk etc. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

b. There is no teaching of the claimed valuation

reflecting... a quantitative description of risk.

(1) No teaching...

This point stands at page 212 of the Brief unanswered by the Examiner. There is no teaching whatsoever of this element. As per the Brief and Section C(1)a of this Reply, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

(2) No reason to combine as to this claim element.

This point stands unanswered by the Examiner at pages 212-214. With no showing of this element, there is no showing a reason to combine this element. As per the above-cited sections of the Brief and Reply, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

c. As to claim 44, incorporate by reference as set forth in A1 and E1.

This point stands at page 214 of the Brief unanswered by the Examiner. As per the Brief, the Examiner failed to respond to this point. Indeed the Examiner in particular failed to respond to the Brief at pages 83-84, that Ginsberg could not be modified to handle honest to goodness property without defeating its purpose as a "real time barometer" and index. Where the Examiner fails to show any claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*, and art is not shown properly combinable, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

2. As to Claims 148-152, there is no teaching of a component of temporally decomposed property.

This point stands at pages 214-217 of the Brief unanswered by the Examiner

because the Examiner relies on arguments rebutted elsewhere in the Reply. As to the points raised by the Examiner at pages 73-74, see the Reply at Section E(2). As to the Examiner's assertions regarding Coughlan, see Reply at Section C which incorporates section A1. Further, in response to the Examiner's comments, once again, it is not proper to find a motivation to combine/modify from non-analogous art cited to support Official Notice, Ginsberg is directed to an index, and courts do not view indexes as property. The Examiner failed to show Ginsberg modifiable to handle honest to goodness property without destroying the "real time barometer" object of Ginsberg (i.e., changing/expiring bonds would mean a changing/expiring index). The Examiner's multiple theories of Ginsberg do not have a system-determined purchase price for the sale of the property subject to the valuations. The valuation of the claimed property interest in the art has not been shown combinable, and there is a failure to consider each claim *as a whole*. As per the Brief, the Examiner failed to show this claimed element. More so, the Examiner failed to make a showing of this element in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. In accordance with *In re Fine*, the rejection must be reversed.

a. As to claims 149-152

(1) As to claim 149 there also is no teaching of the claimed remainder interest.

This point stands at page 217 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)d. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

(2) As to claim 150 there also is no teaching of the claimed equity interest in a remainder interest.

This point stands at page 218 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)e. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

(3) As to claim 151 there also is no teaching of the claimed estate for years interest.

This point stands at page 219 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)f. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, according to the law in *In re Fine*, the rejection must be reversed.

(4) As to claim 152 there also is no teaching of the claimed term of years interest.

This point stands at page 220 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)g. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

3. As to claims 153-157, the Examiner's contentions regarding fractional are not completely understood, but are traversed.

This point stands at pages 229-221 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2). As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

a. As to claims 154-157

(1) As to claim 154 there also is no teaching of the claimed remainder interest.

This point stands at page 222 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)d. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Pursuant to *In re Fine*, the rejection must be reversed.

(2) As to claim 155 there also is no teaching of the claimed equity interest in a remainder interest.

This point stands at pages 222-223 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)e. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

(3) As to claim 156 there also is no teaching of the claimed estate for years interest.

This point stands at pages 223-224 of the Brief unanswered by the Examiner.

The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)f. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed. See *In re Fine*.

(4) As to claim 157 there also is no teaching of the claimed term of years interest.

This point stands at pages 225-226 of the Brief unanswered by the Examiner.

The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)g. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

4. As to claims 158-162, there is no teaching of a second member of the group.

a. No reason to combine.

This point stands at pages 225-226 of the Brief unanswered by the Examiner.

The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2). As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to

In re Fine.

5. As to claims 159-162

a. As to claim 159 there also is no teaching of the claimed remainder interest.

This point stands at pages 226-227 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)d. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. In accordance with *In re Fine*, the rejection must be reversed.

b. As to claim 160 there also is no teaching of the claimed equity interest in a remainder interest.

This point stands at pages 227-228 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)e. As per the Brief, the Examiner failed to show this claimed element, moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed. See, *In re Fine*.

c. As to claim 161 there also is no teaching of the claimed estate for years interest.

This point stands at pages 228-229 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)f. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed

element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

d. As to claim 162 there also is no teaching of the claimed term of years interest.

This point stands at pages 229-230 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)g. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Accordingly, the rejection must be reversed pursuant to *In re Fine*.

6. As to claims 163-167, the Examiner's contentions regarding fractional are not understood, and therefore are traversed.

This point stands at pages 230-231 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(3). As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

a. As to claim 164 there also is no teaching of the claimed remainder interest.

This point stands at pages 231-232 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)d. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed

element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

b. As to claim 165 there also is no teaching of the claimed equity interest in a remainder interest.

This point stands at pages 232-233 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)e. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed. See, *In re Fine*.

c. As to claim 166, there also is no teaching of the claimed estate for years interest.

This point stands at pages 233-234 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)f. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Therefore, the rejection must be reversed. See, *In re Fine*.

d. As to claim 167 there also is no teaching of the claimed term of years interest.

This point stands at page 234 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)g. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed

element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

7. As to claims 168-172, there is no teaching of risk free.

This point stands at pages 234-237 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(3)a. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed. See, e.g., *In re Fine*.

a. As to claim 169 there also is no teaching of the claimed remainder interest.

This point stands at pages 237-238 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)d. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

b. As to claim 170 there also is no teaching of the claimed equity interest in a remainder interest.

This point stands at pages 238-239 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)e. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to

In re Fine.

c. As to claim 171 there also is no teaching of the claimed estate for years interest.

This point stands at pages 239-240 of the Brief unanswered by the Examiner.

The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)f. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Accordingly, the rejection must be reversed pursuant to *In re Fine*.

d. As to claim 172 there also is no teaching of the claimed term of years interest.

This point stands at page 240 of the Brief unanswered by the Examiner. The

Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)g. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Therefore, the rejection must be reversed. See, *In re Fine*.

8. As to claims 173-177, the Examiner's contentions regarding fractional are not understood, and therefore are traversed.

This point stands at pages 240-242 of the Brief unanswered by the Examiner.

The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(3). As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to

In re Fine.

a. As to claims 174-177

(1) As to claim 174 there also is no teaching of the claimed remainder interest.

This point stands at pages 242-243 of the Brief unanswered by the Examiner.

The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)d. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

(2) As to claim 175 there also is no teaching of the claimed equity interest in a remainder interest.

This point stands at page 243-244 of the Brief unanswered by the Examiner.

The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)e. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

(3) As to claim 176 there also is no teaching of the claimed estate for years interest.

This point stands at pages 244-245 of the Brief unanswered by the Examiner.

The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)f. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed

element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

(4) As to claim 177 there also is no teaching of the claimed term of years interest.

This point stands at page 245 of the Brief unanswered by the Examiner. The Examiner replies on arguments asserted in connection with other claims and refuted in the reply corresponding to these claims. See Reply at Section E(2)g. As per the Brief, the Examiner failed to show this claimed element, and moreover failed to make a proper showing in connection with each claim *as a whole*. Where cited art fails to disclose an expressly claimed element, there is no *prima facie* obviousness. Thus, the rejection must be reversed pursuant to *In re Fine*.

I. Incorporation by reference: A1, C, D, E and F, and further, Ginsberg, Graff, Coughlan, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 178-180, there is no reason to combine.

a. There is No Plausible Reason to Combine.

The Examiner argues at page 87 of the Answer that there are no issues re: this combination in recycling older arguments. However there are unique issues here because the added art citation causes conflicts in the proposed combination. Further, the application of the art is unique because it is a different invention (claims, respectively) *as a whole*. Thus, the Examiner's comments are not precisely responsive. The Board is directed to the Brief at this section, especially pages 245-251.

(1). As to claim 179, further, there is no teaching of a component of another property.

The Examiner argues in the Answer at page 88 as follows:

"Examiner calls attention to the first two sentences of Graff's article:

Recent research has shown that, as an investment, commercial real estate can be regarded as the sum of *two components* - one a true "equity" asset, the other a portfolio of debt instruments similar to corporate bonds. The

researchers have asserted that property ownership can be structured to *separate the components* without incurring major transaction costs. [Emphasis added (by the Examiner)].

After the components have been separated, then, following Graff's own words, the true "equity" asset and the portfolio of debt instruments are separately owned properties, as explained in more detail on page 51 of Graff's article, each them a component of the original commercial real estate property. Therefore, claim 179 should not be allowable... ."

Appellant is mystified as to the Examiner's thinking here. The Examiner is confusing the problem set out in the Specification's Background of the Invention with the remedy provided by the property separation described in the Specification, e.g., in the Summary of the Invention. The Examiner's cited portion of Graff relates to the problem described in the Specification's Background of the Invention, but this does not provide one iota of support for this rejection of a solution to the problem, as set out in the instant claim.

More specifically, the Background of the Invention states at pages 2-3:

"real estate lending practices of insurance companies and commercial banks came under greater regulatory scrutiny in response to increased loan defaults in the early 1990s, which led to a tightening of standards for real estate loans and a reduction in flexibility on loan terms. ... Despite some withdrawal by savings and loan institutions, insurance companies were still available to provide financing for sound commercial real estate developments. However, there were at least two key constraints on loan commitments by insurance companies that had the practical effect of restricting the amount of available financing."

The Summary of the Invention continues at pages 4-5 that,

"In response to the above, a new financial product has been developed based on the concept that property value consists of separately valuable property rights that can be worth more when sold separately. In a manner of speaking, the whole can be less than the sum of its parts. ... Thus it is possible to split *ownership of this type of property into at least two components* (emphasis added), at least one of which is a fixed-income asset."

These citations show that the Invention was a solution to a problem: the Examiner quoting the problem does not teach how to solve the problem. The inventor observed shortcomings in debt finance of commercial real estate, and the inventor alone discovered that the property ownership separation of the invention is an alternative to debt finance that creates

a fixed-income ownership interest in leased property as an *alternative* to debt. In fact, there is no debt in the property financing structure described in the Specification.

Courts have held over and over again that property debt is not an ownership interest in said property, and conversely. Thus, the Examiner's chosen citation demonstrates the absurdity of this contention that the Graff article teaches the property separation of the Specification. It follows that all claim rejections that depend on the Graff article as prior art must be overturned, including in particular claim 179.

Appellant continues with discussion of the rest of the Examiner's comments to set the record straight and to clarify the severity of the flaws in the Examiner's logic, here in particular with regard to the Graff article. The Examiner clearly regards as significant this cited observation in Graff that the "equity" asset financed by the "portfolio of debt instruments" and said debt portfolio "are separately owned properties, each of them a component of the original commercial real estate property."

Appellant replies that it is a well-known legal principle that property debt constitutes a legal interest in the property encumbered by the debt, and it is well-known that property debt constitutes an economic interest (i.e., an economic component) in the encumbered property. However, the debt is not an ownership interest in the encumbered property, which means that there is nothing in the Examiner's citation relating to the claimed property is a component of another property.

As for the disclosure in the Examiner's citation that said equity asset and said debt portfolio "are separately owned properties, each of them a component of the original commercial real estate property," Applicant responds, first, that property debt is property in its own right, because it has an exchangeable value and adds to the lender's wealth or estate (Gifis, Law Dictionary, definition of property). However, the property encumbered by the debt and the property constituted by the debt are totally different properties, and it is misleading of the Examiner to suggest otherwise. As for the Examiner's attempt to infer significance from the

remark in the citation that the property constituted by the debt and the property encumbered by the debt are separately owned, the comment is an obvious consequence of the well known legal prohibition against a legal entity being legally indebted to itself. Appellant observes that neither the prohibition concerning debt nor the obvious consequence cited by the Examiner teaches anything about the claimed property is a component of another property. As per the ownership separation discussed in the Specification, the property ownership separation is an alternative to debt finance that doesn't involve any debt.

In sum, the Examiner failed to make out a case of *prima facie* obviousness for this response too. Thus, the rejection must be reversed.

J. There is no apparent ground of rejection for claims 238-241, and it is believed that the rejection is a PTO mistake.

Appellant appreciates the Examiner's acknowledgment that claims here would be allowable if rewritten. The undersigned believes that it is not procedurally proper to enter an amendment to the claims at this point in the case, but will do so if the case is not otherwise completely allowed from this or subsequent appeal.

K. Other Issues

Applicant does not concede that Ginsberg, Epstein, Coughlan, or any art within one year prior to Applicant's priority date constitutes "prior art," and the Examiner has not made out a case that merits swearing behind. Appellant has been careful about this designation to preserve the opportunity for swearing behind should it ever be necessary.

Second, as to the Examiner's comment about an issue of reasonable diligence in reducing the invention to practice (a potential interference issue of no relevance here), this comment is pure and personal speculation and completely inappropriate. The same is true about the Examiner's comment about a possible public use: the Examiner has no idea about a possible public use and has no idea about diligence in reducing the invention to practice. Without any supporting evidence, his personal point of view is irrelevant mud slinging. Like much in this

rejection, the Examiner is throwing mud hoping something will stick.

Third, it is respectfully submitted that the Examiner has gone to undue lengths to try to obstruct issuance of this patent and to attempt to cause damage to a patent issued from a successful appeal, e.g., raising issues of possible public use and diligence, when the Examiner has no clue about any of this. This behavior is uncalled for and inappropriate.

X. Conclusion

Section 2143 of the MPEP provides that "if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). In this decision, the court reversed the rejection holding the 'suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.' (*In re Ratti* at 270 F.2d at 813, 123 USPQ at 352)."

All claims have been rejected based on Ginsberg as a teaching of the claimed valuation of property.

All rejections depend on Ginsberg, which generates values for an index, as one can see from the title and the patent. Courts have considered the question of whether indexes are property, and it is well settled that an index is not property. See *Standard and Poor's Corp. v. Commodity Exch., Inc.*, 683 F.2d 704 (2d Cir. 1982) and *Board of Trade v. Dow Jones & Co.*, 439 N.E. 526 (Ill. App. Ct. 1982) *aff'd*, 456 N.E.2d 84 (Ill. 1983).


In view of these court decisions, the Examiner's proposed modification or combination of Ginsberg would change the principle of operation of Ginsberg (which, if changed as the Examiner proposed, has not been shown operable at all in Answer at pages 83-84), and therefore the teachings of the cited art are not sufficient to render the claims *prima facie* obvious.

This is dispositive of the entire case. The rest of the Brief essentially sets the record straight on other matters alleged by the Examiner.

The rejection of each of Appellant's claims has not been shown to be *prima facie* obvious pursuant to the standards of 35 U.S.C. Sec. 103, for each and all of the reasons set out above. No one would ever have thought of the claimed invention from the cited art combination, no one could properly combine/modify this art into the claimed invention, and no one would ever have thought of the cited art combination and approach to interpreting the claims, but for Appellant's claims. Therefore, the Final Rejection of the claims must be reversed to and the Board is respectfully requested allow issuance of those claims on appeal along with the other claims that have been allowed.

Respectfully submitted,

Date: April 21, 2003


Peter K. Trzyna
(Reg. No. 32,601)

P.O. Box 7131
Chicago, IL 60680-7131

(312) 240-0824



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of:

Richard Graff

RE

MAY 06 2003

Group Art Unit: 2761

For: COMPUTERS MAKING FINANCIAL
ANALYSIS OUTPUT HAVING
PROPERTY VALUATIONS

GROUP 3600

Examiner: N. Rosen

USSN: 09/134,453

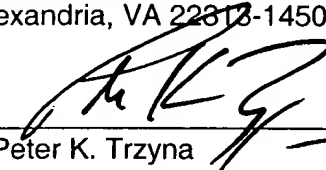
Filed: August 14, 1998

Certificate Under 37 CFR 1.8 (a)

I hereby certify this REPLY BRIEF is being deposited in triplicate with the United States Postal Service as first class mail in an envelope addressed to: MS Appeal Brief-Patents, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on or before

Date:

April 21, 2003


Peter K. Trzyna